Economic Research
JPMorgan Chase Bank
July 2004

Global Data Watch Handbook

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June 25, 2004

Global Data Watch

- **Fed to hike rates against reassuring global economic backdrop**
- **Global monetary policy will remain highly accommodative in 04H2**
- **Weak IFO survey shows coast not yet clear in the Euro area**
- **EU signals more flexibility on Stability and Growth Pact**
- **Slowing housing appreciation will not deter Bank of England**
- **Canadian election likely to produce minority government**

Settling in for the long haul

Although the outcome of next week 's FOMC meeting—a 25bp rise in the Fed funds rate — is not in doubt, the event nonetheless is significant. The Fed 's action will express its conviction that the global economy no longer is fragile, despite lingering concerns about its health and well being. In the United States, a long period of easy money has promoted an impressive improvement in the balance sheet position of corporations *and* households. Similarly, cheap currencies have been an elixir for Asian corporates. These improvements, which are producing business spending and hiring gains, are the main event of 2004. Critical too are signs of increased pricing power in global goods-producing industries.

A healthy global business cycle expansion is not expected to sustain GDP growth at the heady 4.6% pace seen over the past year. Growth in Asia already is moderating, in part as China comes off the boil. Next week's JPMorgan 's global PMI survey for June is expected to post a decline, including a fall in the US ISM survey to a still-elevated 61.0. Upbeat news from the US June payroll report (225,000 job gain) and the Japanese Tankan survey (a rise from +12 to

US [illegible]

[illegible], sa; JPMorgan est

Bank of Japan Tankan survey

DI, nsa; JPMorgan Q2 est

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Bruce Kasman
(1-212) 834-5515
bruce.c.kasman@jpmorgan.com
JPMorgan Chase Bank

David Hensley
(1-212) 834-5516
david.hensley@jpmorgan.com
JPMorgan Chase Bank

www.morganmarkets.com

Contents

Jayanth Nazareth
(1-212) 834-5310
jayanth.nazareth@jpmorgan.com
JPMorgan Chase Bank

Silvia Pepino
(44-20) 7325-4250
silvia.pepino@jpmorgan.com
JPMorgan Chase Bank, London

Patricia Hagan Kuwayama
(1-212) 834-5704
patricia.h.kuwayama@jpmorgan.com
JPMorgan Chase Bank

www.morganmarkets.com

JPMorgan Chase Bank, New York
Bruce Kasman (1-212) 834-5515
bruce.c.kasman@jpmorgan.com

Introduction

Economic indicators are a diet staple for financial market participants and policymakers. Each day the new information provided by indicators is processed to draw judgements on where growth, inflation, and asset prices are headed. The quality of these judgements is directly related to understanding of the information being processed.

This task has become daunting as the global economy integrates and economic news is tracked on a global basis. Informed analysis requires a grasp of how individual indicators are compiled and what they represent. Although a rose may still be a rose by any other name, the same can not be said for a report on consumer prices.

At JPMorgan, "data watching" – forecasting and analyzing indicators – is a core function. This handbook is intended to provide a reference guide to the indicators that we track regularly. In our flagship publication *Global Data Watch,* 35 countries are covered each week and forecasts are provided for hundreds of economic releases. Each release that appears regularly in the publication is documented in this handbook. Also included are the economic aggregates produced by JPMorgan to facilitate global and regional analysis.

The handbook begins with a section explaining the methodology and conventions used in presenting data. Following this are individual sections on global and country data releases. For ease of use and comparison, they are presented in a consistent fashion across countries.

Enjoy!

Bruce Kasman
Head of Economic Research

Editorial manager

Allison Stewart (1-212) 834-5373
allison.stewart@jpmorgan.com

Global Data Watch Handbook is also available on line via the JPMorgan Research Web site.

JPMorgan Chase Bank, London
Silvia Pepino (44-20)7325-4250
JPMorgan Chase Bank, New York
Patricia Hagan Kuwayama (1-212) 834-5704

Data watching terminology and concepts

There are several relatively straightforward statistical issues that are indispensable in understanding data, both for independently interpreting economic data and for following the evaluations and reports of analysts. The following outlines some key elements that apply almost universally:

"Nominal" versus "real" magnitudes:

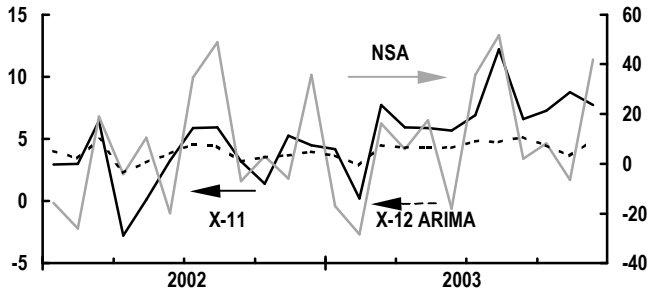
So-called "real" data series have had the effects of price changes (inflation) stripped out of aggregates originally compiled in value terms. For data measuring economic activity, this procedure aims to reflect only changes in volumes produced, consumed, or traded—in contrast with "nominal" values, which reflect a combination of changes in volumes and prices, making activity comparisons problematic. In most cases, nominal monthly data are translated into real terms by deflating by a broad price measure appropriate to the activity involved: e.g., a consumer price index for retail sales; a capital goods price deflator for investment. Analysts also employ "real" series for some prices: for instance, the value of a commodity such as gold, or of a foreign exchange rate, may be converted to "real" terms by deflating it using an overall price index. (See also discussion of fixed-weight versus chain measures, below.)

Seasonal adjustment:

Most activity has a seasonal pattern, often related to weather (for example, ice cream sales rise in summer and tail off in winter) or important holidays with fixed dates. Christmas and New Year's are the best example of the latter in many countries, but important holidays are often specific to individual countries. The simplest form of seasonal adjustment attempts to strip out these effects by smoothing the monthly (or weekly) data based on past intra-year patterns. *Global Data Watch* uses the abbreviation "sa" to designate data that are seasonally adjusted in this sense, in contrast with raw data which are not seasonally adjusted or "nsa."

Retail sales and seasonality

%ch over 6 months, ar, both sales



The ratio of the NSA scale to the SA scale is 4:1

More sophisticated seasonal adjustment procedures also attempt to strip out regular distortions that do not occur on a fixed calendar each year: for example, Easter or Ramadan, and Asian new year celebrations that are based on a lunar calendar. Adjustments may be made, in addition, for changes in working or shopping days that are affected by legislation or national customs, and by calendar quirks such as leap years. Series that have been adjusted this way (whether or not they are seasonally adjusted in the narrower sense) are often referred to as "calendar adjusted" or "working day adjusted" ("wda").

While conceptually simple, seasonal adjustment in practice is a complicated and sensitive statistical procedure. Detailed decisions have to be made about things like: how to adjust for the effect of an extra Saturday, Sunday, or holidayon retail sales; or of a Monday as opposed to a Thursday holiday on vacation time or factory output. No statistical procedure can compensate for all these distortions, which remain challenges in analyzing high-frequency data no matter how sophisticated the methods used. Indeed, one of the reasons why economists like to supplement "hard" data with qualitative surveys is that the latter are relatively free of such technical distortions—which respondents tend to "look through" in giving their answers about recent or expected activity.

Two of the most widely used methods of seasonal adjustment were developed by the US Census Bureau, and are known as Census X-11 and X-12-ARIMA (Auto Regressive Integrated Moving Average). The former is older and more straightforward, but makes only very general adjustment for trading days and holidays. The latter is more advanced, making alternative seasonal, trading day, and holiday adjustments, and incorporating additional functions for dealing with trend irregularities. In Europe, a third method of adjustment is favored, known as TRAMO/SEATS (time series regression with ARIMA noise, missing observations, and outliers). TRAMO/SEATS is thought to be more effective than X-12-ARIMA in adjusting for data with a large irregular component.

Calculating annual changes:

Most of the time, high-frequency (quarterly, monthly, or weekly) data are used to evaluate trends that are ultimately going to be judged as annual growth rates. How the latest data are interpreted depends heavily on the mechanics of how basic calculations are done:

Expressing change: new data must be placed in context. While a range of interpretations will usually be possible for

JPMorgan Chase Bank, New York
Patricia Hagan Kuwayama (1-212) 834-5704
Jayanth Nazareth (1-212) 834-5310

a single month's result, there are two elementary rules for comparisons. First, seasonally adjusted data can be compared with the previous month's (m/m, sa) or quarter's (q/q, sa) figure. This usually provides the best gauge of current developments in a time series (sometimes referred to as "sequential" change). Second, seasonally unadjusted (nsa) data usually need to be compared with the same period a year earlier. The resulting "oya" change provides a rough adjustment for seasonality, but has the disadvantage that it reflects changes over an entire 12-month period and may not give a good picture of recent trends.

> A note on terminology: in *Global Data Watch*, "oya" or "over year ago" comparison is used to mean something different from "y/y" or " year on year" change. The latter refers to the whole (average or sum) of the calendar or fiscal year compared to the whole of the previous calendar or fiscal year.

When interpreting GDP growth on a quarterly basis, economists usually use quarterly changes (%q/q) but four-quarter changes (%oya) are also used. The oya measure of growth is especially important in Emerging Market economies and some others, where the seasonally adjusted GDP figures are not published or are not considered reliable.

For annual growth rates, the difference between y/y and q4/q4 comparisons can be significant: in effect, q4/q4 growth is the average of the quarterly growth rates in any calendar year, while y/y growth is far more heavily influenced by the first quarter of the year, and also affected by intra-year patterns in the previous year. This is one reason why economists often prefer to cast their discussion in terms of the former, four-quarter comparison.

The table below illustrates how big the differences can be, using actual US GDP data for 1990 and 1991: On a full-year-over-full year basis, growth was -0.2%y/y in 1991 (7100.5/7112.5). This reflects the two bad quarters in 1990 and weak 91Q1 reading. On a q4/q4 basis, GDP grew 1.1% in 1991—a more meaningful measure of the trend that equals the average of the four quarters' growth.

Measuring GDP

	Level (chained 2000$)	%q/q, ar	%q4/q4	%y/y
Q1	7112.1	4.7		
Q2	7130.3	1.0		
Q3	7130.8	0.0		
Q4	7076.9	-3.0		
1990 average	7112.5			
Q1	7040.8	-2.0		
Q2	7086.5	2.6		
Q3	7120.7	1.9		
Q4	7154.1	1.9	1.1	
1991 average	7100.5			-0.2

Smoothing: It can be misleading to concentrate on just the last couple of data points in a volatile data series. In such cases, trends often become clearer when the high-frequency data are smoothed. A well established way to do this is to average levels over a period of several months or quarters before measuring change. Common measures are three- (3mma) and six- (6mma) month moving averages, which are usually centered (and plotted) on the last month of the data series in order to provide the greatest sensitivity to the latest data point.

Annualized rates of change: Annualization simply assumes that a level or rate of change in a particular month or quarter is continued for a whole year. For example, a seasonally adjusted level of 120,000 housing starts translates into an annualized level of 1.44 million: (120,000*12). Similarly, a 0.5%m/m, sa gain in retail sales translates into 6.2%m/m, saar: (((1.005/1.000)^12)*100)-100.

Extrapolating annualized quarterly rates of change from monthly data points: Where every month of two quarters' seasonally adjusted data levels is known, calculating the annualized rate of change is straightforward:

> ((average(Apr:Jun)/average(Jan:Mar)^4)-1)*100). But where only one or two months of the second quarter are known, extrapolating the rate of change becomes more complex:
>
> Where only one month of the second quarter is known, the equation is as follows: ((Apr/average(Jan:Mar)^6)-1)*100). The calculation is raised to the power of six because it is one sixth of a year (two months) from the midpoint of the first quarter (mid-February) to mid-April.
>
> And, where two months of the second quarter are known, the equation becomes: ((average(Apr:May)/average(Jan:Mar)^4.8)-1)*100). As there are 2.5 months from the midpoint of the first quarter (mid-February) to the midpoint of April/May (May 1), the equation is raised to the power of 4.8 (i.e., 12/2.5).
>
> Accordingly, the full quarter average for the second quarter, when the June data also become available, is raised to the power of 4 (12/3), as the Q2 average (mid-May) is exactly 3 months from the Q1 average (mid-February).

JPMorgan Chase Bank, London
Silvia Pepino (44-20)7325-4250
JPMorgan Chase Bank, New York
Patricia Hagan Kuwayama (1-212) 834-5704

Diffusion indices:

The term "diffusion index" has a variety of meanings. In US labor market reports, diffusion indexes of employment change indicate how broadly dispersed growth is across industries or sectors, as a supplement to overall averages that may unduly reflect fast or slow growth in limited parts of the economy.

In *Global Data Watch,* the most commonly encountered diffusion indices (DIs; sometimes also referred to as "percent balances") are those used to aggregate responses to qualitative questions in surveys of business or consumer opinion. This is done in a variety of ways, but a common pattern is to classify responses to various questions as "positive," "negative," (sometimes subdivided into "considerably" versus simply positive or negative) and "neutral," and then compile indices reflecting the percentage of "positive" versus "negative" (sometimes with double weight given to the extreme, or "considerably" responses) or "neutral" answers. The resulting index may be calculated so as to have a neutral level of zero, 50, or 100 (but these can be easily transformed to be comparable with each other). Often, economists estimate their own "neutral" levels from these surveys by observing past correlations with actual growth.

Today, the most widely used diffusion indices are PMIs (traditionally known as Purchasing Managers surveys) which are released by almost all industrialized countries and some Emerging Market economies in fairly comparable form. In the US and Euro area the PMIs are composite indices made up of subcomponents, each of which has a fixed weight. PMI indices are calculated as the percentage of respondents indicating higher activity plus half of those reporting no change, so a reading of 50 means that the same percentage of respondents indicated higher activity as indicated lower activity.

Fixed-weight versus chain measures:

It may sound straightforward to measure growth or inflation in aggregate; but in fact, any overall growth rate is actually a composite of individual changes that have been weighted together in some particular way. Volume measures like industrial production or (in some cases) retail sales have to be computed from micro-level magnitudes that may be measured in bushels, gallons, or pounds. Consumer price indices are weighted averages for some market basket, usually based on surveys of the spending pattern of a "typical" household; while wholesale or producer price indices are compiled using the composition of activity from an industry or business census.

The most obvious way to compile such indices is to weight each component's activity by its importance (presumably measured in value terms) in either the "base" year of the index (giving what statisticians call a "Laspeyres" index) or the most recent period (called a "Paasche" index). However, when the composition of activity changes markedly, this method tends to either underemphasize or overemphasize items that have become more important—whether because of changes in technology or consumers' response to relative price changes, or both.

In recent years, computers and IT products offer a dramatic example of this sort of bias that has distorted both growth and inflation measures in many countries. In Japan, for instance, the GDP deflators (which are constructed with end-period weights but indexed to 1995=100) are believed to be significantly overstating deflation, while CPI and corporate goods price inflation (both measured with fixed base-period weights from 2000) understate it. The overall CPI fell 0.2%oya in 03Q3, compared to 1.6% for the private consumption deflator; for capital goods, the GDP deflator fell 7.2%oya and the capital goods CGPI only 3.4%. One consequence is that real GDP growth is thought to be overstated by as much as a percentage point due to the exaggerated fall in the deflator (intensified by the long gap between the 1995 base period and the current data). Some countries have begun to use chain-weighted indices to overcome these problems in measuring growth and inflation. The chain system is a moving average; i.e., there is a "chaining" of very recent weights which roll forward every year to reflect changes in the relative importance of individual components.

- **Chained inflation indices**. In the US, the traditional (fixed-weight) CPI measure of inflation is supplemented by a chain-weighted Personal Consumption Expenditure Price Index (PCEPI). There are a number of other differences between the two measures as well. (A detailed discussion can be found in an article from the Kansas City Fed at www.kc.frb.org/Publicat/econrev/PDF/

JPMorgan Chase Bank, New York
Patricia Hagan Kuwayama (1-212) 834-5704
Jayanth Nazareth (1-212) 834-5310

3q99clar.pdf*)*. While both measures have advantages, the Federal Reserve has adopted the PCEPI as its preferred measure of overall inflation for policy purposes.

- **Chained activity indices.** Purely output-based activity measures are not free of bias, either: they overstate growth if they use fixed, base-period prices to combine volumes of different goods, and understate growth if they use end-period prices. The table below provides an arithmetic example. In this example, real GDP growth in 2002 is 34.0% using 2000 weights, and 29.0% using 2001 weights, but would be 31.5% using the chain weighted system Here, chain-weighted growth is calculated using a "Fisher" formula: it is a geometric mean of two calculations of growth, one using the weights from the current year, and the other using weights from the preceding year.

- **US chain-weighted GDP.** The US has gone the farthest toward adopting chained measures of both growth and inflation in its GDP reports. For example, the 2001-02 annual percent change in real GDP uses prices for 2001 and 2002 as weights, and the 2001-02 change in GDP prices uses quantities for 2001 and 2002 as weights. The computations involve several steps (See BEA web page: *http://www.bea.gov/bea/articles/NATIONAL/NIPA/1997/0597od.pdf*.)

  1) The components of GDP (personal consumption expenditures, equipment and software investment, and so on) are measured in current dollars;

  2) Each component is then deflated by its own chain price index (e.g., for consumer spending using the PCEPI);

  3) Real growth rates are calculated for each component;

  4) Aggregate growth in GDP is calculated using a moving average of weights for each component; i.e., by a Fisher chain-weighting procedure.

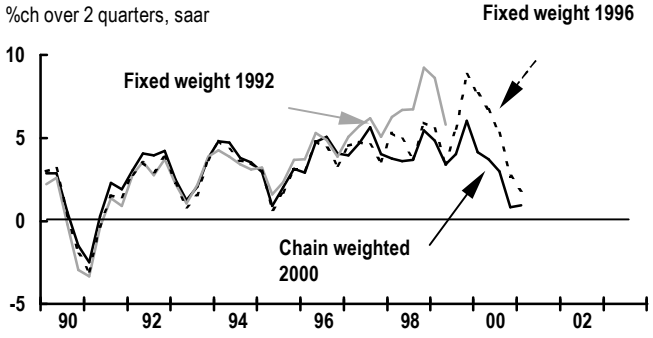
Measuring growth in a two product economy
Level (%,ch from prev period)

	2000	2001	2002
Quantity (units)			
Coffee	2000	2100 (5)	2200 (5)
Global Data Watches	1500	2000 (33)	3000 (50)
Prices per unit			
Coffee	1.5	1.7 (13)	1.95 (15)
GDWs	2.8	2 (-29)	1.5 (-25)
Nominal GDP	7125	7570 (6)	8790 (16)
Coffee	3000	3570 (19)	4290 (20)
GDWS	4125	4000 (-3)	4500 (13)
When base year is 2000			
Real GDP	7125	8650 (21)	11550 (34)
Coffee	3000	3150 (5)	3300 (5)
GDWs	4125	5500 (33)	8250 (50)
Deflator 2000=1	1.0	0.9	0.8
When base year is 2001			
Real GDP (2001)	6400	7570 (18)	9740 (29)
Coffee	3400	3570 (5)	3740 (5)
GDWs	3000	4000 (33)	6000 (50)
Deflator (2001=1)	1.1	1.0	0.8
When base year is 2002			
Real GDP 2002	6150	7095 (15)	8790 (24)
Coffee	3900	4095 (5)	4290 (5)
GDWs	2250	3000 (33)	4500 (50)
Deflator (2002=1)	1.2	1.1	1.0

There are several advantages to using chain-weighted indexes to measure GDP growth. Newer and more up-to-date weights provide a more accurate measure of the relative importance of components in GDP. Fixed weights overstate the importance of components such as high-tech with rapid growth in real sales and falling prices (substitution bias). For more information on US chain-weighted GDP calculations see: *www.bea.gov/bea/ARTICLES/2003/11November/1103%20Chain-dollar.pdf*.

The chart below illustrates the effects of using chain-weighted indexes for GDP growth. Using 1992 fixed weights growth was understated before the high-tech boom and overstated after. The more up-to-date 1996 fixed weights adjusted for some of this bias, but not all. Finally, the chain-weighted GDP index (with 2000 chained dollars) shows a much smoother path in GDP growth, adjusting for the substitution bias.

Real GDP
%ch over 2 quarters, saar



JPMorgan Chase Bank, London
Silvia Pepino (44-20) 7325-4250
JPMorgan Chase Bank, New York
Patricia Hagan Kuwayama (1-212) 834-5704

Data Watch abbreviations

The *Global Data Watch* uses a number of standard abbreviations. Here is a complete listing:

sa = seasonally adjusted

nsa = not seasonally adjusted
saar = seasonally adjusted annual rate

wr = weekly rate

mr = monthly rate

qr = quarterly rate

ar = annualized rate

ma = moving average

%oya = percent change over a year ago (e.g., Jan 04 vs. Jan 03)

%m/m = percent change from previous month (e.g., Jan 04 vs. Dec 03)

%3m = percent change from three months ago (e.g., Jan 04 vs. Oct 03)

%3m/3m* = percentage change of the average of the last three months from the average of the prior three months (e.g., average Dec 03, Jan 04, Feb 04 vs. average Sep 03, Oct 03, Nov 03)

%6m* = percent change from six months ago (e.g., Jan 04 vs. Jul 03)

%3m/6m* = percentage change of the average of the last three months from the average of three months half a year earlier (e.g., average Dec 03, Jan 04, Feb 04 vs. average Jun 03, Jul 03, Aug 03).

%6m/6m* = percentage change of the average of the last six months from the average of the prior six months (e.g., average Sep 03, Oct 03, Nov 03, Dec 03, Jan 04, Feb 04 vs. average Mar 03, Apr 03, May 03, Jun 03, Jul 03, Aug 03)

%q/q* = percent change from previous quarter (e.g., 04Q1 vs. 03Q4)

%y/y = percent change from previous year, on a full-year-over-full-year basis, as distinct from %ch q4/q4

%ch q4/q4 = percent change from previous year on a fourth-quarter to fourth-quarter basis

Note that many of the abbreviations above are used in combination with other abbreviations. For instance, %m/m, sa is the seasonally adjusted percent change from the previous month, and %q/q, saar is the percent change from the previous quarter at a seasonally adjusted annual rate. For a discussion of statistical issues involved in seasonal adjustment and annualization, see the *Data Watching terminology and concepts* section.

* These terms are usually annualized in the US.

JPMorgan Chase Bank, London
Silvia Pepino (1-212) 834-5310
JPMorgan Chase Bank, New York
Patricia Hagan Kuwayama (1-212) 834-5704

Data standards and classifications

The following are some international standards or guidelines that are referred to in the individual country sections of this *Handbook*. The organizations that promulgate these standards generally maintain web sites, as noted, on which detailed up-to-date information can be found.

United Nations System of National Accounts

Source: www.unstats.un.org/unsd/nationalaccount

The system of National Accounts (SNA) consists of a coherent, consistent and integrated set of macroeconomic accounts, balance sheets, and tables based on a set of internationally agreed concepts, definitions, classifications, and accounting rules. Most countries design their data systems for compiling key aggregates such as the GDP in conformity with this standard, using handbooks prepared by the UN Statistics Division and other international agencies. The System of National Accounts 1993 evolved from the earlier *1953 SNA* and the *1968 SNA*.

IMF balance of payments definitions

Source: www.imf.org/external/np/sta/bop/bop.

The International Monetary Fund asks member countries to provide detailed data on their external positions in a standard format and publishes these data in its monthly *International Financial Statistics*. Since 1948, the IMF Statistics Department has prepared a series of Balance of Payment Manuals, the most recent one being the 5th edition from 1993 (harmonized with the 1993 SNA). Most countries follow the IMF methodology and definitions in their balance of payments releases, although some have yet to completely convert to the latest standards of the 5th edition of the Manual. The definitions and methodology are set up so that data from member countries of the IMF, the OECD, and the European Union can be compared.

IMF standards for monetary and fiscal data

Source: IMF, *International Financial Statistics* (IFS)

In addition to balance of payment data, the IMF has standard formats for presenting monetary and credit aggregates, as well as data on government finances, debt, and international reserves. Some countries use these as their basic data presentations; others do not, but instead provide the data (usually with a lag compared to the national data series) separately in IMF format for publication in the monthly *IFS*.

Trade terminology

Source: same as above, and (for the US) www.census.gov/foreign-trade/guide

Customs exports: Most countries report exports using information from customs clearances (hence the term "customs trade data"), giving values in f.o.b. (free on board) terms or f.a.s. (free alongside ship). F.a.s. is the value of exports at a seaport, airport, or border post, based on the transaction price, including inland freight, insurance, and other charges incurred in placing the merchandise alongside the carrier at the port of export. The f.a.s. value excludes, and f.o.b. includes, cost of loading merchandise aboard a carrier. Both exclude insurance and transportation costs.

Customs imports: Imports at customs are usually reported in c.i.f. (cost including insurance and freight) terms, which represents the value of merchandise at the first port of arrival. It is calculated by adding import charges to the value of goods (customs duties are not included). For balance of payments reporting purposes (following the above-mentioned IMF standards), import values must be adjusted to exclude insurance and freight, which are counted in services rather than merchandise trade. This is one of the main differences between customs trade data and balance of payments trade data. In the United States, the monthly trade release presents both imports and exports (and the balance) already adjusted to balance of payment terms and including both goods and services, making it different (and later) than the customs trade releases of other countries.

ILO definition of unemployment

Source: www.ilo.org

Unemployment statistics in a number of countries follow definitions outlined in the "Resolution concerning statistics of the economically active population, employment, unemployment and underemployment," adopted by the Thirteenth International Conference of Labour Statisticians (Geneva, 1982) and modified in later resolutions. The "unemployed" comprise all persons above a specified age who during the reference period were: "without work," not in paid employment or self-employment; "currently available for work," for paid employment or self-employment during the reference period; and "seeking work," had taken specific steps in a specified reference period to seek paid employment or self-employment.

JPMorgan Chase Bank, London
Silvia Pepino (44-20) 7325-4250
JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310

IMF standards for monetary and fiscal data

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Standard industrial and trade classifications

Source: http://unstats.un.org/unsd/ or (for the US) www.bls.gov/sae/saewhatis.htm

The United Nations Statistics Division compiles international comparisons of industrial production data using the International Standard Industrial Classification of all Economic Activities (ISIC). Most countries use this UN standard for compiling industry data. The US, Canada, and Mexico have their own categories: for most series, the older Standard Industrial Classification (SIC) has been replaced with the new North American Industry Classification System (NAICS); see below.

The UN Statistical Commission also endorses a standard set of classifications for trade statistics (SITC and BEC). These categories, developed by the World Customs Organization, are used in most countries' merchandise trade reports.

North American Industrial Classification System

NAICS is the product of a collaborative effort between the US, Canada, and Mexico, aimed at allowing data to be compared across borders within the North American Free Trade Area.

The NAICS system recognizes hundreds of new business areas, and doubles the number of top-level groupings of industrial classification. The highest level is referred to as the sector, and corresponds to a division within the Standard Industrial Classification (SIC) previously used by the United States. There are 20 broad sectors in the NAICS, compared to 10 divisions in the SIC.

The NAICS is a production-based concept of classification; that is, NAICS classifies each establishment into a detailed industry based in the production processes it uses. Under the older SIC system, some establishments were classified according to production processes, but others were classified using different criteria, such as class of customer. Thus, reclassification under NAICS substantially changes how many and which businesses are included in certain sectors. Examples of how the production-based concept transfigured industrial classification are readily found in wholesale and retail trade, and in auxiliary establishments.

Classification of consumption by purpose (COICOP)

Source: http://europa.eu.int/comm/eurostat/ramon

European countries are engaged in an initiative to standardize consumer price indices (among other statistics). Most refer to the "Classification of Individual Consumption by Purpose Adapted to the Needs of Household Budget Surveys" as the basis for their CPI methodology. Eurostat's RAMON server provides this and other standard classification schemes for member countries.

JPMorgan Securities Inc.
David Hensley (1-212) 834-5516
david.hensley@jpmorgan.com

Global Indicators

The monthly data cycle

Following month	Second following month	Third following month
First third	**First third**	**During month**
Mfg. and all-industry PMI	Retail sales	Employment
Global consumer confidence	Industrial production	
	G-3 core capital goods orders	
	Middle third	
	World trade index	
End	**End**	
Producer price index	Factory goods orders	
Consumer price index		

The quarterly data cycle

	Second following month
	Business equipment spending
	Advance GDP

Background on JPMorgan's global indicators

Data limitations pose a significant challenge in tracking global business cycle activity. No public agency is responsible for constructing and disseminating a comprehensive set of high-frequency global indicators. To help fill this void, JPMorgan has developed a small set of proprietary, monthly global indicators. These include the JPMorgan global PMI, as well as measures of industrial production, exports, manufacturing orders, employment, consumption, consumer confidence, and producer and consumer prices. In addition, JPMorgan compiles a quarterly measure of global GDP.

The coverage and timeliness of these indicators varies. Note, however, that any measure that includes the United States, the Euro are, and Japan already captures about 70% of worldwide activity. With the exception of the global PMIs, which are released on the first and third business day of every month, there are no scheduled release dates for JPMorgan's global indicators. They are featured, however, in the *Global Data Watch*, *World Financial Markets*, and other JPMorgan publications on an ad hoc basis.

JPMorgan Securities Inc.
David Hensley (1-212) 834-5516
david.hensley@jpmorgan.com

Gross domestic product

Source: JPMorgan Economic Research

Description: JPMorgan produces estimates of quarterly and annual global GDP. The quarterly series includes almost every country included in the JPMorgan forecast and dates back to the mid-1990s. The annual series includes thirty countries and dates back to 1971. (Numerous countries have limited historical data on GDP.) Both measures are a weighted average of national data, where the weights represent each country's share of global output during a specified base period (5-year average).

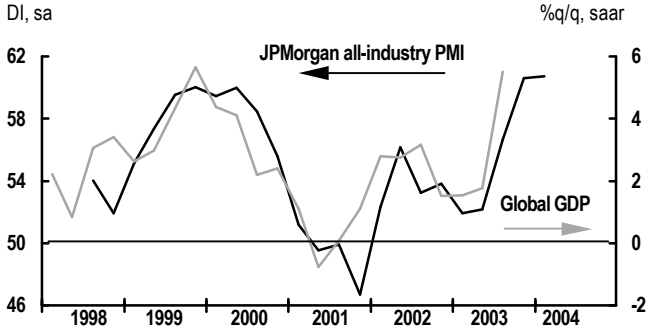
Timing: Most countries report GDP within one or two months following the end of the quarter. Therefore, an advance estimate of global GDP is available late in the second month following the reported quarter.

Seasonal/focus: Source data are seasonally adjusted by national statistical agencies or JPMorgan.

Revisions: Frequent, reflecting revisions to national GDP releases.

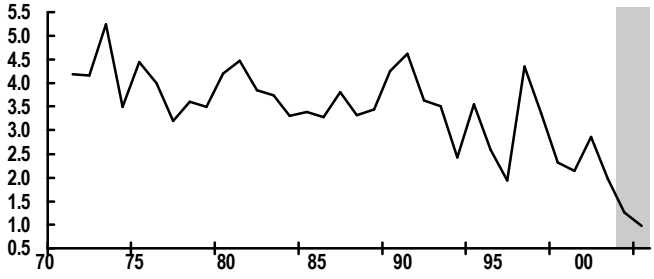
Comments: JPMorgan also compiles a global growth dispersion index. The index is an annual or quarterly time series that tracks the standard deviation of national GDP growth rates. Global growth dispersion typically is countercyclical, but it has been declining over time and the cyclical relationship has broken down over the past few years.

Global activity indicators



JPMorgan global real GDP growth dispersion index

percentage points, standard deviations of annual growth rates



Country weights in global GDP

%

United States	32.9	South Africa	0.4
Canada	2.3		
Argentina	0.8	Euro area	22.7
Brazil	1.9	Germany	6.7
Chile	0.2	France	5.5
Colombia	0.3	Italy	4.0
Ecuador	0.1	Norway	0.6
Mexico	1.9	Sweden	0.8
Peru	0.2	Switzerland	0.9
Venezuela	0.4	United Kingdom	5.0
		Bulgaria	0.0
Japan	14.5	Czech Republic	0.2
Australia	1.3	Hungary	0.2
New Zealand	0.2	Poland	0.6
China	3.7	Slovak Republic	0.1
Hong Kong	0.6	Romania	0.1
India	1.6	Russia	0.9
Indonesia	0.5	Turkey	0.6
Korea	1.4		
Malaysia	0.3		
Philippines	0.2		
Singapore	0.3		
Taiwan	1.0		
Thailand	0.4		

Global PMI

Source: JPMorgan Economic Research, NTC Research, ISM, and IFPMM.

Description: The scope of the global manufacturing, service, and all-industry PMIs is shown in the accompanying tables. The manufacturing composite index is a diffusion index based on a weighted average of five components: new orders (30%), production (25%), employment (20%), supplier deliveries (15%), and inventories (10%). For the global service and all-industry PMIs, the headline business activity index is the counterpart to the production index in the

Global manufacturing and service PMI countries

Manufacturing	Services
United States	United States
Euro area	Euro area
United Kingdom	United Kingdom
Switzerland	
Denmark	
Sweden	
Russia	Russia
Poland	
South Africa	
Japan	
	Hong Kong
Australia	

JPMorgan Securities Inc.
David Hensley (1-212) 834-5516
david.hensley@jpmorgan.com

Global manufacturing and service PMI composition

Global mfg. PMI	Global service PMI	Global all-industry PMI
Overall index level		
Output	+ Output	= all-industry output
New orders	+ New orders	= New orders
Export orders		
Employment	+ Employment	= Employment
Input prices	+ Input prices	= Input prices
Delivery times		
Inventories		

manufacturing PMI. For the US, data for service industries are extracted from the ISM nonmanufacturing survey in order to retain consistency with data for other countries. The global component indexes (e.g., production, orders, employment) are a weighted average of the corresponding national indexes. The weights are based on manufacturing output or total GDP. The global PMI is a diffusion index, where a reading above 50 indicates an increase in the variable since the previous month and below 50 a decrease.

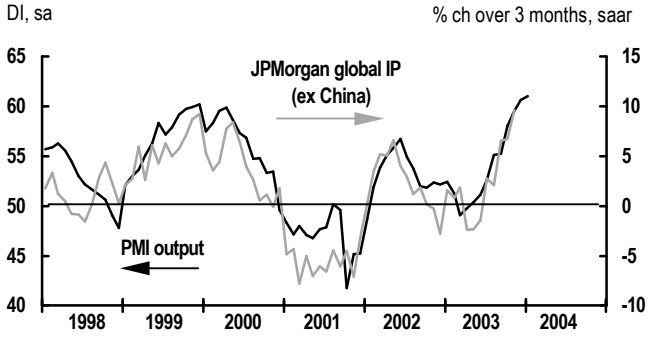
Timing: The manufacturing PMI is released on the first business day of the month at 11:00am, one hour after the release of the US ISM manufacturing index. The service and all-industry PMIs are released on the third business day of the month at 11:00am, one hour after the release of the US nonmanufacturing ISM index.

Seasonal/focus: Source data are seasonally adjusted by the statistics bureau that produces each country PMI.

Revisions: Generally minor except in January, when ISM incorporates updated seasonal factors in its US surveys.

Comments: The PMI provides a timely, comprehensive snapshot of global economic activity. Trends in the all-industry and manufacturing PMIs have proven to be excellent guides to GDP and industrial production. PMI export orders, employment, and input prices also line up well with their hard-activity counterparts.

Global manufacturing output



Industrial production

Source: JPMorgan Economic Research

Description: A monthly index of global industrial production. The weights are national shares of global GDP (5-year average).

Timing: The index usually lags by about two months.

Seasonal/focus: Source data are seasonally adjusted by national statistical agencies or JPMorgan.

Revisions: Generally minor.

Comments: The headline index excludes China, which does not produce a monthly measure of real manufacturing output.

World trade indices

Source: JPMorgan Economic Research

Description: Monthly index of global exports and imports. The base period is Jan 1999=100. Average of local currency data, weighted by Jan 1999 exports (or imports) in US$ terms. The index spans almost every country in the JPMorgan economic forecast.

Global manufacturing export orders

Countries included in World trade indices

US	UK	Japan
Canada	Germany	China
Argentina	Italy	Hong Kong
Brazil	France	India
Chile	Czech Republic	Indonesia
Mexico	Hungary	Korea
	Poland	Malaysia
	Russia	Philippines
	South Africa	Singapore
		Taiwan
		Thailand

JPMorgan Securities Inc.
David Hensley (1-212) 834-5516
david.hensley@jpmorgan.com

Timing: The index usually lags by approximately a month and a half. The US is one of the last major countries to release trade data, so the global index usually is available after its release.

Seasonal/focus: Source data are seasonally adjusted by national statistical agencies or JPMorgan.

Revisions: Regular, as country data is revised.

Comments: The index roughly approximates the trend in export/import volumes and has the notable advantage over conventional compilations in US$ terms of being much less distorted by exchange rate changes.

Global real consumption index

Source: JPMorgan Economic Research

Description: A monthly index of global real consumer spending. The real consumption index is an aggregation of data, using national GDP weights, in eight large countries including the United States, Germany, and Japan.

Timing: The index is available with a lag of about one and a half months.

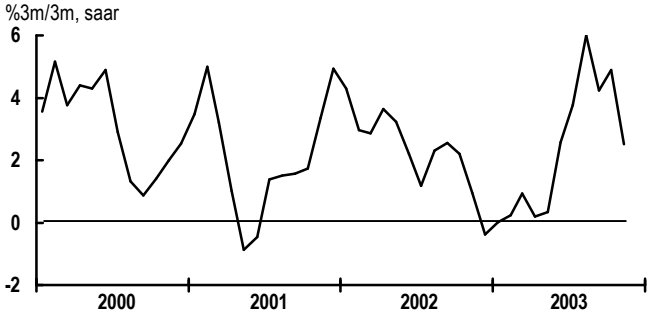
Seasonal/focus: Source data are seasonally adjusted by national statistical agencies or JPMorgan.

Revisions: Minor.

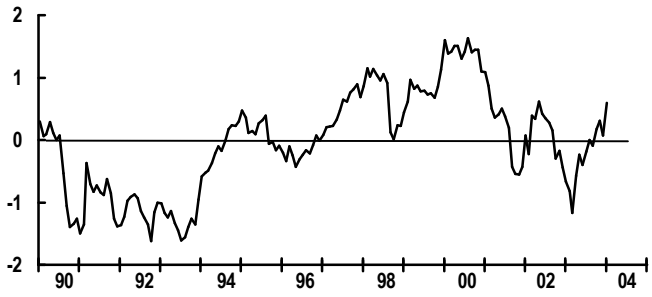
Global consumption index composition

	Indicator
Global	**Consumption index**
US	Real consumption
Canada	Retail sales volume
Mexico	Retail sales volume
Germany	Retail sales volume
France	Consumption of mfg. products
UK	Retail sales volume
Japan	Consumption level index
Korea	Retail sales volume

Global consumption index



JPMorgan global consumer confidence



Comments: Best looked at on a trend basis. Monthly changes are be volatile, especially because of wild swings in the Japanese data.

Global consumer confidence

Source: JPMorgan Economic Research

Description: A monthly index of global consumer confidence.

Timing: Since consumer confidence is one of the more timely economic releases in most countries, a gauge of the past month's global consumer confidence is available relatively early the following month. Some emerging economies may release confidence data slightly later, but a forecast can be used in their absence.

Seasonal/focus: Source data are seasonally adjusted.

Revisions: Minor.

Comments: National data are standardized and then aggregated using GDP weights to construct the global index. To standardize each nation's data, confidence in any given period is expressed as the number of standard deviations from the mean (i.e., the deviation from the mean divided by the standard deviation).

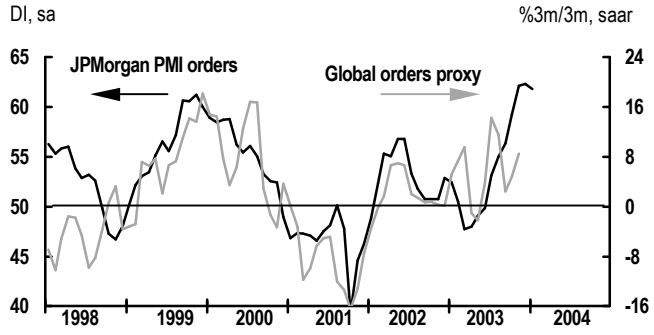
Consumer confidence: various countries

country	*measure used*
US	University of Michigan consumer confidence index
UK*	EU Survey - consumer confidence
Euro area*	EU survey- consumer confidence
Sweden*	NIER consumer confidence
Poland*	EU survey- consumer confidence
Japan	ESRI Tokyo consumer survey
Australia	Westpac-Melbourne Consumer Sentiment Index
Korea	NSO Consumer confidence
Mexico	INEGI Consumer confidence

** percent balance, sa*

JPMorgan Securities Inc.
David Hensley (1-212) 834-5516
david.hensley@jpmorgan.com

Global manufacturing new orders



Global factory goods orders

Source: JPMorgan Economic Research

Description: A monthly index of global factory orders. Data for the United States, Canada, Euro area, Sweden, Japan and Korea are aggregated using GDP weights.

Timing: Available with a two-month time lag, after the Euro area releases its data.

Seasonal/focus: Source data are seasonally adjusted by national statistical agencies or JPMorgan.

Revisions: Can be significant.

Comments: This is a volatile series best looked at on a trend basis. Also, the global PMI orders series is an important leading indicator of global orders because there is such a lag in the release time of orders data.

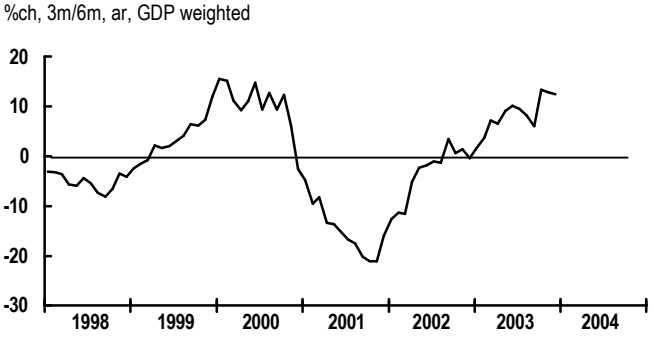
G-3 core capital goods orders

Source: JPMorgan Economic Research

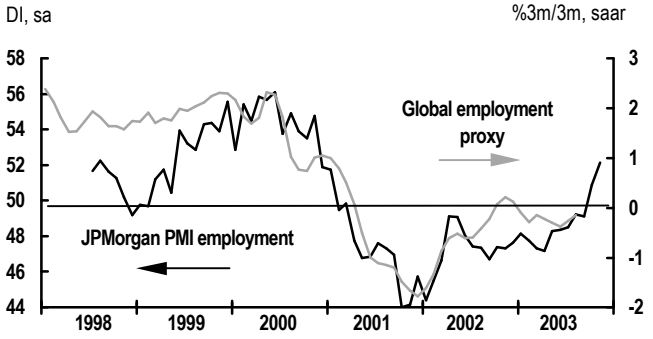
Description: A monthly index of core capital goods orders in the United States, Germany, and Japan. Data are aggregated using GDP weights.

Timing: Available with a two-month time lag, after Germany releases its data.

G-3 core capital goods orders



Global total employment



Seasonal/focus: Seasonally adjusted.

Revisions: Can be significant.

Comments: This is a volatile series best looked at on a trend basis.

Global employment

Source: JPMorgan Economic Research

Description: Global index of employment. Countries included in the narrow measure are the United States, Canada, the United Kingdom, Germany, Sweden, Australia, Mexico, Brazil, Japan, Taiwan, and Korea. National data are aggregated using GDP weights. (JPMorgan also produces an unweighted series.)

Timing: Available with just over a two month lag.

Seasonal/focus: Source data are seasonally adjusted by national statistical agencies or JPMorgan.

Revisions: Minor.

Comments: JPMorgan also produces monthly indexes of global unemployment and manufacturing employment.

Global core CPI

JPMorgan Securities Inc.
David Hensley (1-212) 834-5516
david.hensley@jpmorgan.com

Global consumer prices components and weights
%; of countries with weight of 1.0% or over

US	36.0
Euro area	30.4
Japan	20.6
UK	5.5
Canada	2.7
Singapore	2.0
Sweden	1.0
Mexico	1.7

Global consumer prices

Source: JPMorgan Economic Research

Description: Global index of headline and core consumer prices. Almost every country found in the JPMorgan economic forecast is included in the index. National data are aggregated using GDP weights.

Timing: Late in the following month. Japan and the Euro area are the last regions to report.

Seasonal/focus: Not seasonally adjusted. Focus is on oya changes.

Revisions: Minor.

Global producer prices

Source: JPMorgan Economic Research

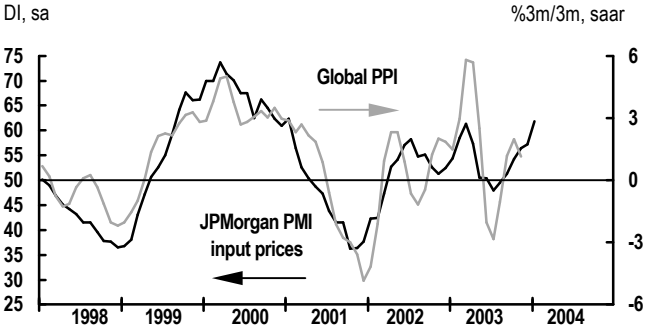
Description: Global index of headline and core producer prices. All of the developed countries and a number of emerging countries are included in the index. National data are aggregated using GDP weights (5-year average).

Timing: Late in the following month. The Euro area is one of the last regions to report.

Seasonal/focus: Not seasonally adjusted. Focus is on oya changes.

Revisions: Minor.

Global manufacturing input prices



Global producer prices and components
%

US	36.4
Euro area	30.7
Japan	20.8
UK	5.6
Canada	2.8
Korea	2.0
Mexico	1.7

Global policy rates

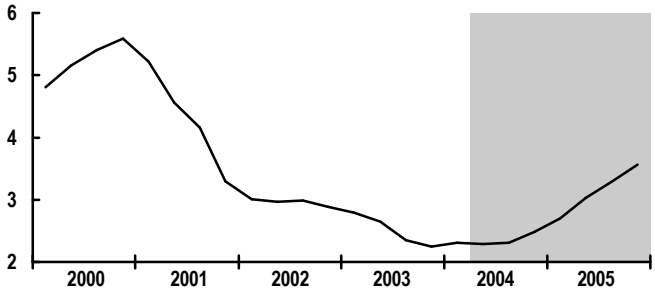
Source: JPMorgan Economic Research

Description: Global index of central bank policy rates. National data are aggregated using GDP weights (5-year average).

Timing: Real time.

Revisions: None.

Global average policy rate
p.p.a.



Global interest rates

The Americas		Asia/Pacific	
United States	Federal funds rate	Australia	Cash rate
Canada	Overnight funding rate	New Zealand	Cash rate
Brazil	SELIC overnight rate	Japan	Overnight call rate
Mexico	91-day Cetes rate	Hong Kong	Discount window base
Chile	Discount rate	China	1-year working capital
		Korea	Overnight call rate
Europe/Africa		Indonesia	1-month SBI rate
Euro area	Refi rate	India	Bank rate
United Kingdom	Repo rate	Philippines	Reverse repo rate
Sweden	Repo rate	Thailand	14-day repo rate
Norway	Deposit rate	Taiwan	Official discount rate
Czech Republic	2-week repo rate		
Hungary	2-week deposit rate		
Poland	14-day intervention rate		
South Africa	Repo rate		
Switzerland	3-month Swiss Libor		
Turkey	Overnight borrowing rate		

JPMorgan Securities Inc.
David Hensley (1-212) 834-5516
david.hensley@jpmorgan.com

Real effective exchange rates

Source: JPMorgan Economic Research

Description: Effective exchange rate indices (also known also as "trade-weighted" exchange rates) are widely used by analysts for several purposes: in nominal form (NEERs), as a summary descriptor of a currency's fortunes in fx markets and as an aid in assessing how exchange rate changes bear on the host country's inflation outlook; and in real (inflation-adjusted) form (REERs), to help gauge how exchange rate changes bear on a country's international trade competitiveness.

REERs were developed in 1974, and so too were "broad" indices encompassing not only major currencies, but also those of many emerging market economies. JPMorgan's latest incarnation is derived weights from the 2000 global pattern of trade in manufactured goods, recognizes for the first time the dramatically expanded role of China in international trade, and broadens the narrow nominal "major currency" indices to encompass the currencies of China, the classic four Asian "tigers," and Mexico, as well as those of the OECD area.

Timing: Real time.

Revisions: None.

Currency weights in USD broad effective exchange rate calculations
percent

	JPMorgan	Federal Reserve Board
	New (2000)	Current
Total	100.0	100.0
Canada	16.7	17.0
Euro area	17.2	17.4
UK	4.3	4.4
Other W. Europe	2.5	2.5
EM Europe	1.7	0.9
Japan	14.2	12.1
China	8.7	9.0
Other EM Asia/ANZ	18.2	20.4
Mexico	11.6	10.6
Other Latin America	2.9	3.9
Other n.i.e.	2.1	1.9

Historical data and other information on JPMorgan's effective exchange rate indices are available through the Internet:
URL: http://www2.jpmorgan.com/MarketDataInd/Forex/currIndex.html.

JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

United States

The monthly data cycle

Same month	Following month	Second following month
Middle third	**First third**	**First third**
Consumer confidence, Michigan survey (prelim) Homebuilders survey Philadelphia Fed survey New York Fed survey	ISM manufacturing survey Motor vehicle sales Chain store sales Employment report	Construction spending Index of leading indicators Factory orders report Consumer credit
End	**Middle third**	**Middle third**
Consumer confidence, Conference Board survey Consumer confidence, Michigan survey (final) Chicago purch. mgrs.	Producer price index Consumer price index Retail sales Industrial production and capacity utilization Housing starts and permits	Mfg and trade inventories International trade
	End	
	Federal budget Durable goods orders Existing home sales Import and export prices Income and consumption PCE price index	

Following month	Second following month	Third following month
Month end	**First Half**	**First Half**
Employment cost index Advance GDP	Productivity and costs	Productivity and cost (revised)
	Second Half	**Second Half**
	Preliminary GDP Corporate profits (prelim)	Final GDP

The weekly data cycle

Tuesday	Wednesday	Thursday
Chain store sales (3-day lag)	Mortgage applications (6-day lag)	Jobless claims (5-day lag)

JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

Gross domestic product

Source: Bureau of Economic Analysis (BEA), Department of Commerce (http://www.bea.gov/bea/dn/home/gdp.htm).

Description: The main quarterly series is expenditure-based GDP, in nominal and inflation- adjusted dollars. The latter is a chained measure of real GDP rather than a traditional fixed-weighted measure. The chain weighting system (see terminology and concept section of this Handbook) results in constant updating of GDP sectoral shares. The report also includes the GDP chain price indices, overall and for components. One that receives special attention is the core PCE chain price index, because the Fed uses this as a prime gauge of inflation performance.

Composition of GDP

% of nominal total in 2004

Total GDP	100
Private consumption	69
Private fixed investment	12
Business fixed Investment:	12
Equipment and software	9
Nonresidential construction	3
Residential investment	4
Government purchases	19
Federal gov't:	7
Consumption	6
Investment	1
State and local gov't:	12
Consumption	10
Investment	2
Exports	10
Imports	-14

Output-based GDP by industry is compiled only for annual periods, and released with a one-year lag. (For example, industry GDP for 2003 will be released at the end of 2004.)

The BEA also calculates GDP using independent income data. Figures on corporate profits and labor compensation are used as source data. A statistical discrepancy is included, since income-based GDP must be equal to the expenditure total.

Timing: The advance report is issued around the fourth week of the month following the reported quarter; the data are revised in the preliminary report (one month later) and in the final report (two months later).

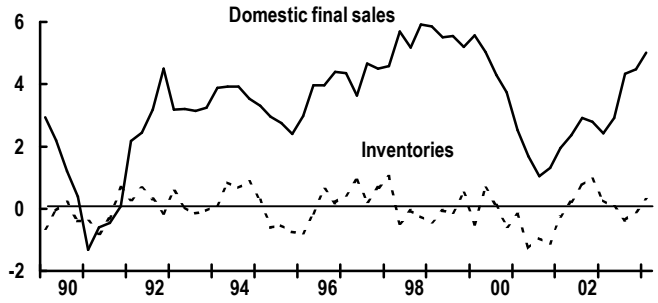
Seasonal/focus: All data are seasonally adjusted. Focus is on change from the previous quarter at an annual rate, with the split between domestic final sales and the inventory contribution receiving much attention.

Revisions: Often large, especially between the advance and preliminary reports. An annual benchmark revision, extending back three years, is usually made in July. In 2003, however, the BEA released its comprehensive benchmark revisions in early December, alongside more extensive historical revisions back to 1929, and with newly reformatted tables and extra details. In addition, the base year was updated to 2000 from 1996.

The more comprehensive revision process in 2003 included: incorporation of newly available benchmark input-output accounts for 1997; statistical changes reflecting improved methodologies; changes in definitions; and improvements in classifications and presentation that make the US NIPA tables more consistent with international guidelines. The estimates of income and employment by industry were converted to the 1997 North American Industry Classification (NAICS). The NAICS improves the placement of primary activities among NIPA subcomponents, and, because of the differences between the NAICS and the earlier, Standard Industrial Classification (SIC) categories (see terminology and concepts), the methodologies used to estimate some NIPA accounts were changed.

Change in inventories vs real domesic final sales

%ch contribution, oya



Comments: Although the GDP is the most comprehensive of all reports it usually receives less market attention than the ISM and payrolls report because it is not as timely.

Corporate profits

Source: BEA (www.bea.gov/bea/dn/home/corporate prof.htm)

Description: A quarterly estimate of economywide profits of all corporations based on earnings releases from individual companies.

JPMorgan focuses on adjusted corporate profits, a measure that puts depreciation and inventory expense on a consistent cost basis. Adjusted profits measures earnings from current production and omits capital gains. The release provides estimates of adjusted profits of US corporations, profits earned from foreign operations, and profits of foreign companies from US operations.

The BEA also releases estimates of book profits, but book profits can be a misleading guide to corporate earnings. For example, recent tax changes allow accelerated depreciation as an incentive to boost equipment spending. The tax change acts to boost book depreciation expense, reduce book profits, and thus reduce corporate tax liabilities. However, the increase in depreciation expense and reduction in book profits is merely an accounting tool used to deliver a

JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

tax break. Adjusted profits measures depreciation on a cost basis and provides a more accurate reading of profitability.

Timing: Released with the preliminary GDP release, except for Q4 corporate profits, which are provided with the final release of GDP.

Seasonal/focus: The data are seasonally adjusted. Focus is on the seasonally adjusted quarterly change (not annualized).

Revisions: The data are revised along with the GDP data.

Comments: Does not receive much market focus, since individual company earnings are released earlier.

Industrial production/capacity utilization

Source: Federal Reserve Board (www.federalreserve.gov/releases/G17/)

Description: Monthly indices of production volume are broken down into industry groups (manufacturing, mining, and utilities) and market groups (consumer goods, business equipment, and materials). All data are compiled in volume terms; there is no nominal series. The overall index is a weighted sum of output in 295 industries. In November 2002, the Fed switched to using NAICS categories instead of the previously used SIC (see terminology and concepts).

Capacity utilization represents output as a percent of capacity, with capacity defined as each firm's estimate of "the greatest level of output that a plant can maintain within the framework of a related work schedule, taking account of normal down time, and assuming sufficient availability of inputs to operate the machinery and equipment in place."

The report also includes diffusion indices, calculated as the percent of series that increased over one, three, or six months plus half the percent that were unchanged.

The industrial production report is unique in that it is released by the Fed; other output and growth indicators are released by the Commerce Department. The Fed started producing the IP report in 1919 in response to monetary policymakers' need for indicators of the business cycle.

Timing: Released around the 15th of the following month.

Seasonal/focus: Data are seasonally adjusted at the 4-digit NAICS level. The Federal Reserve uses the concurrent seasonal adjustment process (so the latest data point is used in calculating the seasonal factors). Focus is on change from previous month, with total and manufacturing output and capacity utilization receiving the most attention.

Revisions: Usually modest, extending back three months in each report. A more comprehensive benchmark revision occurs annually in November. The annual data used in benchmarking the individual IP indices are constructed from a variety of source data, such as the quinquennial Censuses of Manufacturers and Mineral Industries and the Annual survey of Manufacturers, prepared by the Bureau of the Census; the Minerals Yearbook, prepared by the United States Geological Survey of the Department of the Interior; and publications of the Department of Energy.

Availability of IP data
percent of value added in 2004

	month of estimate			
Data based on:	1st	2nd	3rd	4th
Physical product	26	40	48	48
Production hours	30	30	30	30
Electric power use	0	18	18	18
Other	44	12	4	4
Total	100	100	100	100

Comments: Manufacturing production accounts for 14% of GDP, but is a highly cyclical part of the economy. The capacity utilization rate for manufacturing alone is more useful than the overall utilization figure for signalling inflation pressures. A "neutral" level of capital utilization in manufacturing is a little over 81%; readings of 83% or higher are typically associated with a pickup in the finished goods PPI.

The individual indices are constructed from two main types of source data: output measured in physical units; and data on inputs to the production process, from which output is inferred. Data on physical products, such as tons of steel or barrels of oil, are obtained from private trade associations and from government agencies; data of this type are used to estimate monthly IP wherever possible and appropriate. Production items for some industries such as high-tech are derived by dividing estimated nominal output by a corresponding price index. Where suitable data are not present on physical products, output is based on either production worker hours or use of electric power. Data on hours worked by production workers are collected in the monthly establishment survey carried out by the BLS.

Source data on physical products include both monthly and quarterly series. In the final version (four months after the reference month), a physical product indicator is available for about half of the series (by value added). Of the 26% of the initial data that are based on physical products, about two-thirds include weekly data, to be replaced by monthly data when those become available in subsequent months. Most quarterly data are incorporated with the third estimate of IP. About 4.0% of physical data are available too late for inclusion in any of these monthly reports, and are incorporated during the annual revision (table).

JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

Index of leading economic indicators

Source: The Conference Board

Description: A monthly composite index of 10 economic variables designed to signal turning points in the economy. The components are: average manufacturing hours, initial jobless claims, new orders for consumer goods, ISM supplier deliveries, manufacturers' real new orders for nondefense capital goods, building permits, stock prices, real money supply, interest rate spread, and the expectation component of the Michigan confidence index. Weights of the contributions are standardized based on the historical volatility of each series.

Timing: Released around the end of the following month.

Seasonal/focus: The data are seasonally adjusted. Focus is on change from previous month in the overall index.

Revisions: The underlying data are revised, leading to revisions to the headline number. Three components—nondefense capital goods, real orders for consumer goods, and the real money supply—are not known before the index is released. The Conference Board makes estimates for these based on the prior two months' data.

Comments: The index has its problems. False signals are not uncommon and individual components, (which are released before the report) such as jobless claims, are usually more timely and accurate indicators of future activity. Along with the leading indicators, the report also includes an index of coincident indicators and lagging indicators.

ISM manufacturing survey

Source: Institute For Supply Management (www.ism.ws/ISMReport/index.cfm)

Description: A monthly survey on manufacturers' activity. The ISM composite index, the focus of the report, is a diffusion index based on a weighted average of five components: new orders (30%), production (25%), employment (20%), supplier deliveries (15%), and inventories (10%). The approximately 400 companies participating in the survey are asked if activity in each category is higher, lower, or unchanged compared with a month ago (for supplier deliveries the question is whether raw materials are arriving slower, faster, or at the same pace as a month ago; slower deliveries are associated with faster growth). The subindex of each component is calculated as the percent reporting "higher" plus one half the percent reporting "no change." As an example, if 30% of respondents report an increase in orders, 20% report a decrease, and 50% report no change, the orders reading equals 55. Under this system, readings above 50 generally imply expansion, and below 50 contraction. Along with the overall index and its five components, supplementary indices are provided for prices paid (reflecting the prices of materials), export orders, imports, and overall order backlogs.

Correlation between the ISM and regional manufacturing surveys

	1990-2004	1999-2004	2001-2004
Chicago PMI	0.86	0.90	0.89
Philadelphia Fed	0.77	0.90	0.93
New York Empire	NA	NA	0.88

Some sectoral analysis is available in the commentary, with color provided on which of the 20 broad industries are showing growth or contraction.

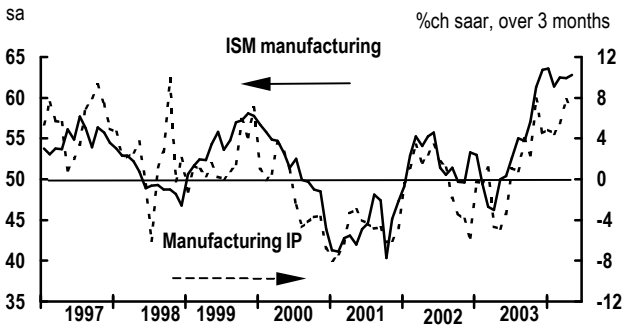
Timing: Released on the first business day of the following month. The survey responses typically reflect activity through the third week of the month.

Seasonal/focus: The data are seasonally adjusted using seasonal factors provided by the BEA. Attention is on the monthly change as well as the absolute level.

Revisions: Only an annual revision in January (when seasonal factors are reestimated).

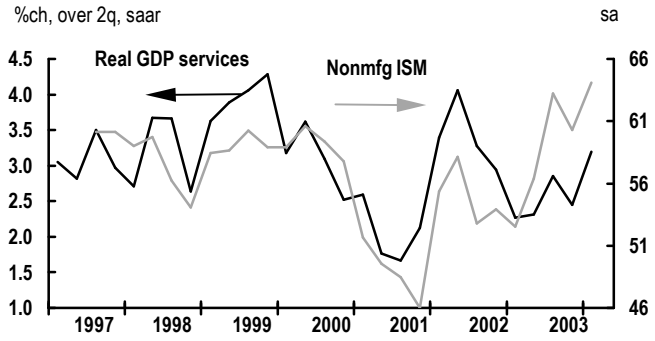
Comments: The overall index is a key gauge of manufacturing activity. Although its correlation with manufacturing output on a month-to-month basis is limited, it is usually an excellent gauge of the underlying trend. Moreover, despite the simple system used (firms are asked the direction, not the magnitude, of changes), the series is much less volatile than other manufacturing indicators such as the Philly Fed, Chicago PMI, and New York Empire State Fed surveys. Although the series is conceptually designed for 50 to be consistent with no growth in manufacturing, empirically, readings of 50 are associated with manufacturing output growth of about 1.0% at an annual rate. According to the ISM, a reading of 42.7 historically is consistent with unchanged GDP. The empirical breakeven point between contraction and expansion varies for individual components. For example, the breakeven point for the employment index vs manufacturing payrolls is 47.6.

ISM manufacturing and factory output ex high-tech



JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

US: services GDP and JPMorgan's nonmanufacturing ISM index



ISM nonmanufacturing survey

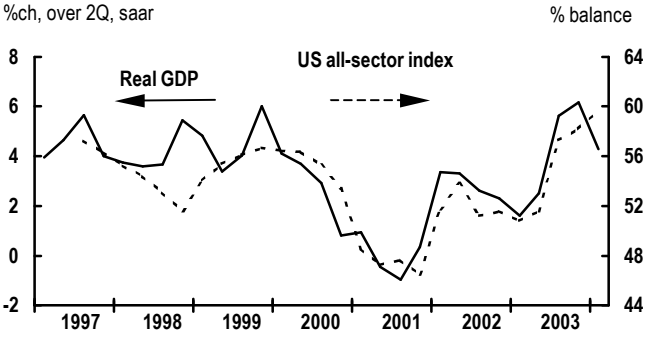
Source: Institute for Supply Management (www.ism.ws/ISMReport/NMROB022004.htm)

Description: A monthly survey of nonmanufacturers' activity. The headline business activity index is not a composite index based on the components. Instead, the headline series is the counterpart to the production index in the manufacturing ISM. The survey also includes indices on new orders, employment, inventory change, supplier deliveries, input prices, backlog of orders, new export orders, imports, and inventory sentiment. The inventory sentiment index is based on whether nonmanufactuers say their inventories are "too high" or "too low." All the indices are diffusion indexes, constructed in the same way as the manufacturing ISM's diffusion indices.

The ISM surveys more than 370 companies in 62 nonmanufacturing industries covering agriculture, forestry, fisheries, mining, construction, transportation, communications, electricity, gas, sanitary services, wholesale trade, retail trade, finance, insurance, and real estate, personal services, and public administration.

Timing: Released on the third business day of the following month (or two business days after the release of the ISM survey). The report includes responses until the very end of the month.

US real GDP versus JPMorgan's all-sector activity PMI



Seasonal/focus: The business activity index is the headline and receives most attention. The employment and new orders indices also receive attention. The business activity index, new orders, imports, and employment indices are seasonally adjusted; other series are not.

Revisions: Only an annual revision in January (when seasonal factors are reestimated).

Comments: The nonmanufacturing ISM survey is less established than the manufacturing survey. But, over its brief history dating back to July 1997, it has been a reasonably good indicator of nonmanufacturing activity, which represents 84% of the US economy.

JPMorgan has created a nonmanufacturing composite index (applying weights and seasonal factors for indices not seasonally adjusted by ISM), which uses a similar methodology as the manufacturing ISM. The composite index is smoother than the headline business activity index.

The JPMorgan all-sector activity index, which combines the composite indexes of both the manufacturing and nonmanufacturing ISM has proven to be an effective tool in tracking overall US economic activity.

Chicago Purchasing Managers Survey

Source: Purchasing Managers Association of Chicago (www.napm-chicago.org/current.pdf)

Description: A monthly survey of manufacturing activity in the Chicago area, broadly similar in structure to the national survey (with above 50 signaling expansion and below 50 contraction). The report includes an overall index with five activity subindices (production, new orders, backlogs, employment, and supplier deliveries) and a commodity price index (reflecting raw materials prices). The inventories index is not part of the overall composite index. The survey is based on a questionnaire sent to 200 Chicago-area firms, with a response rate of around 40-50%.

Timing: Released on the last business day of the reporting month (one business day earlier than the national survey). The final cutoff point for responses is typically the second week of the month (compared with the third week for the ISM survey and the first week for the Philadelphia Federal Reserve survey).

Seasonal/focus: The data are seasonally adjusted. Focus is on the change from the previous month, with the overall index and the price index receiving the most attention.

JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

Revisions: An annual revision occurs in January, when seasonal factors are reestimated. Occasional small revisions occur during the rest of the year.

Comments: This is one of several regional manufacturing surveys. The Chicago and Philadelphia surveys receive more attention than the others because of their consistent timeliness. Other purchasing managers surveys are done in Milwaukee, Detroit, and Cincinnati. The New York Fed also conducts a survey for New York State. The regional purchasing managers surveys are undertaken independently; their results are not used for calculating the national index.

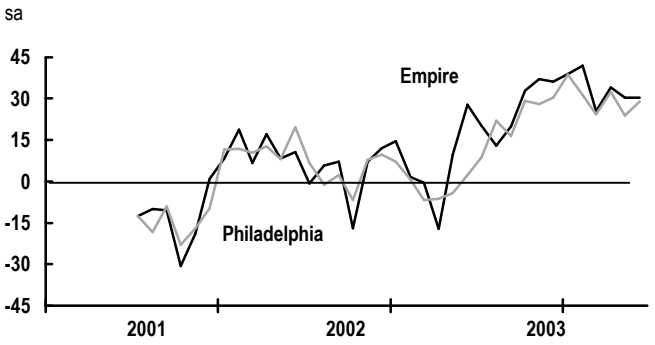
Philadelphia Federal Reserve survey

Source: Federal Reserve Bank of Philadelphia (www.phil.frb.org/files/bos/bos0204.html)

Description: A monthly survey of manufacturers in the Philadelphia Federal Reserve Bank district (covering the eastern two-thirds of Pennsylvania, southern New Jersey, and all of Delaware). The main indicator in the report is the current general activity index. It reflects responses to the question: "What is your evaluation of the level of general business activity?" Respondents are given the choice of "increasing," "decreasing," or "not changing." The index is a percent balance: those reporting an increase minus those reporting a decrease. For example, if 30% say increasing, 20% say decreasing, and 50% say no change, the index will be 10. Under this system, readings above zero imply expansion, and readings below zero contraction. (To make the level comparable to the purchasing managers survey, divide by two and add 50—resulting in 55 for the example.)

Along with the current activity index, the most important parts of the report are the indices of new orders, shipments, employment, and prices. The prices paid index covers prices paid for raw materials; it is comparable to the price index in the ISM. The prices received index reflects prices received by manufacturers for their products; there is no comparable part of the national index. The difference between prices paid and received is a hint about trends in profit margins. Other subjects covered by the Philadelphia Fed survey include: general business activity six months ahead; unfilled orders; delivery times; inventories; average workweek; and capital expenditures six months ahead.

Philadelphia Fed index vs New York Empire index



Timing: Released on the third Thursday of the reporting month. The report is based on responses received through the 10th of the month.

Seasonal/focus: The data are seasonally adjusted. Focus is on the change from the previous month, with the current general activity index and the two price indexes receiving the most attention.

Revisions: Annual revision only, when seasonal factors are reestimated in January.

Comments: The Philadelphia Fed survey is closely followed by the markets as an indicator of what to expect from the ISM; however, the Philadelphia number is much more volatile. The volatility reflects not just the smaller and less regionally diverse sample but also the more open-ended question about activity. Note that while the Philadelphia report includes specific questions on items such as orders and delivery items, they are not components of the general activity index. This contrasts with the ISM, which is a weighted average of subindexes based on five specific questions. JPMorgan creates its own composite series (using its own weights and seasonal adjustment factors) from the Philadelphia index using a similar methodology as the ISM manufacturing composite index.

New York Empire State survey

Source: Federal Reserve Bank of New York (www.ny.frb.org/research/regional_economy/mfg_survey/2_2004.pdf)

Description: A monthly survey, similar in methodology to the Philadelphia Fed survey. The questionnaire is sent on the first day of each month to the same pool of about 175 manufacturing executives in New York State, typically presidents or CEOs. About 100 responses are received. Most are completed by the 10th, although surveys are accepted until the 15th. The main indicator is the current general activity index.

The other subindexes that receive attention are: shipments, new orders, and the employment index.

Timing: Released in the middle of the same month

Seasonal/focus: The data are seasonally adjusted. As with the Philadelphia Fed, focus is on the change from the previous month.

JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

Revisions: The previous month's data are revised.)

Comments: The headline indicator has proven a useful guide to the direction of the more popular Philadelphia Fed index since the New York survey began in July 2001. However, during 2003 the relationship seems to have broken down.

Manufacturing and trade inventories

Source: Bureau of the Census, Department of Commerce

Description: A monthly report of inventories, sales, and the inventory-to-sales ratios at manufacturers, merchant wholesalers, and retailers. The only new information in the report is for retail inventories, since retail sales are reported in the retail sales report, manufacturers' sales—or shipments—and inventories are reported in the manufacturers report, and wholesalers' sales and inventories are reported in the wholesalers report, all of which are released earlier.

Timing: Released around the middle of the second month following the reporting period—very late compared with most other data. The wholesale and manufacturing parts are released about one and two weeks earlier, respectively.

Seasonal/focus: The data are seasonally adjusted. Focus is on change from the previous month in total inventories and on the overall inventory-to-sales ratio.

Revisions: Modest.

Comments: M&T inventories excluding the retail and wholesale auto component are used by the Commerce Department to estimate nonfarm inventories in the GDP accounts. (Auto producers' inventories and retail inventories of autos for the GDP are calculated using industry data.) Given the late release, the advance estimate of GDP incorporates an assumption for inventories in the third month of the quarter.

The I/S ratio is looked to for evidence on whether inventories are too high or too low. The ratio has been in a secular downtrend for a while, consistent with the trend toward firms using more efficient inventory control.

Inventory data are reported on a "book value" basis, which can reflect changes owing to prices, volumes, or accounting methods. Converting from nominal to real terms requires an inventory valuation adjustment as well as a deflator.

Employment report

Source: Bureau of Labor Statistics (BLS), Department of Labor (www.bls.gov/opub/hom/homtoc.htm)

Description: A monthly report of the results of two separate surveys, of establishments and of households. The establishment (payroll) survey records the number of employees on nonagricultural payrolls, the length of the average workweek, total hours worked, and average hourly earnings. The hours and earnings data cover only production and nonsupervisory workers (about 82% of private employment and 68% of total employment). The establishment survey is based on 160,000 businesses and government agencies, which cover approximately 400,000 individual work sites. The sample includes approximately one-third (43 million) of total nonfarm employment. Average weekly hours are based on the hours employees worked (or were on paid leave) during the reference period. The index of hours worked is the product of the number of employees and the average workweek. A worker is considered employed if he or she was paid for working any portion of the reference pay period that includes the 12th of the month.

Some estimation is used to accurately reflect net new business formation in the establishment survey. In a dynamic economy, firms are continually opening and closing, with largely offsetting effects. But businesses that close exit the payroll survey immediately, whereas new firms start filing with a lag. To adjust for the resulting bias the BLS uses an ARIMA based model to estimate for the creation of new businesses and associated job growth (see http://www.bls.gov/opub/hom/pdf/homch2.pdf for more detailed explanation).

The household survey is more of a "door to door" survey, based on interviews with representative members of around 60,000 households. Although the household survey also includes a figure for employment growth, the main information in the survey is the unemployment rate. Respondents are asked to list the occupants of the house aged 16 or over as being: a) employed (including self-employed); b) not employed but actively looking for work in the previous four weeks ("unemployed"); or c) not employed and not actively looking for work over the previous four weeks. This last category includes "discouraged" workers, who have given up looking for a job.

From this breakdown, the labor force is defined as the number employed plus the number unemployed. The unemployment rate is calculated as the number unemployed (as defined above) as a percent of the labor force. For example, if, out of a working age population of 222 million, 138 million are employed, 9 million are not employed but actively looking, and 75 million are not in the labor force, the rate will be 6.1% (9 million divided by 147 million).

Given the household survey's smaller sample size, the household figures on employment tend to be much more volatile from month to month than payrolls in the establish-

JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

ment survey. However, the unemployment rate itself is usually fairly reliable, with distortions to employment and the labor force tending to cancel each other out.

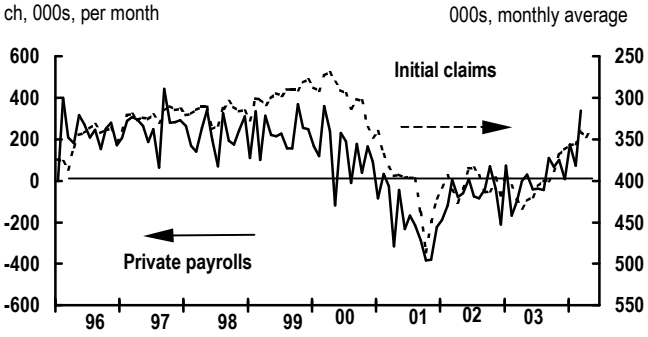
There are times—as in 2003—when the household and establishment measures of employment growth diverge significantly. There are several conceptual differences between reports. The establishment survey does not include farm workers, self employed workers, or household workers; and it counts workers with multiple jobs multiple times. Also, the household survey is limited to workers of 16 years or older; the establishment survey is not limited by age.

Timing: Usually reported on the first Friday of the following month. The sample covers the week (Sunday through Saturday) containing the 12th of the survey month. As a result, the sample can be as early as the week ending the 12th or as late as the week ending the 18th. Likewise, the time between samples can be either four weeks (eight times per year) or five weeks (four times).

Seasonal/focus: Data are seasonally adjusted. With the release of the June 2003 report the BLS moved to concurrent seasonal adjustment for the national payroll series. This method uses the most recent data in the calculation of seasonal adjustment factors. Previously, current observations were not applied every month; instead, projected factors were calculated twice a year and applied to six months of unadjusted data. The household survey began using concurrent seasonal adjustment with the release of the December 2003 report. Focus is on changes from the previous month, with most attention on total and manufacturing payrolls, total and manufacturing hours worked, average hourly earnings, and the unemployment rate. It is sometimes helpful to exclude particular sectors that may have been affected by one-off factors

Revisions: Can be large for the establishment survey; each report contains revisions to the prior two months. At the first release of preliminary data only 65% of the sample has been collected. A month later, when over 80% of the sample is collected, estimates cover all detailed industries. The final estimates are published two months after the preliminary release, when 90% of the sample reports are collected. The household survey is revised with an annual reestimation of the seasonal factors, usually released with the December report. New population controls were introduced in the household survey beginning January 2003. In addition to the above, every year the establishment survey data goes through a benchmark revision, in which the employment estimates are "re-anchored" to the full population count of employees based on state unemployment insurance

Private nonfarm payrolls and jobless claims



records. Starting in 2004, this annual revision is released in February with an 11-month lag: that is, March 2003 results were released in February 2004. (In October, the BLS provides a preliminary estimate of the size of the next benchmark revision.) Revised seasonal adjustment factors extending back five years are released along with the benchmark revisions.

Comments: This is the most important single report on economic activity. It contains extensive new timely information on the broad economy as well as on individual sectors. Growth in hours worked provides an early signal of whether GDP is accelerating or decelerating in the current quarter (albeit less reliably so in the current era of high productivity growth than before), since most of the direct figures on spending and inventory are released much later. Hours worked in manufacturing are used to estimate industrial production.

Jobless claims

Source: Employment and Training Administration. Department of Labor (http://ows.doleta.gov/press/2004/021904.html)

Description: A weekly report of newly filed claims for unemployment benefits at state unemployment offices. In addition to new claims, the total number of people receiving benefits (referred to in the jargon as "continuing claims") is also published. Persons receiving benefits do not have to keep applying each week.

In general, there are no restrictions on when a claim is filed, although there is typically a short lag before a person is eligible to receive a benefit. Similarly, there are no restrictions on who may file a claim, although some claims may be unsuccessful. Eligibility rules vary by state. To receive benefits, an individual typically must have worked for a while and contributed taxes to the unemployment trust fund. Striking workers are generally not eligible for benefits, although

JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

other workers displaced because of the strike (for example, because supplies are no longer required) usually are eligible. Benefits typically are paid for up to six months of unemployment, but the duration is usually extended during periods of high unemployment.

The claims numbers highlight the high level of turnover in US labor markets, owing in part to large seasonal swings. For instance, in 1999 new claims averaged about 300,000 per week, or about 1.2 million per month; net employment growth averaged just under 224,000 per month.

Timing: Reported on Thursday each week, with a 5-day lag for new claims and a 12-day lag for the number receiving benefits.

Seasonal/focus: The data are seasonally adjusted. Focus is on the level relative to recent trend, with new claims receiving more attention than the number of beneficiaries.

Revisions: Minor.

Comments: Jobless claims are a timely gauge of labor market conditions, especially at turning points. Their main value is in signaling change in the trend (pickup versus slowdown). They are less useful for gauging the magnitude of change. Significantly, they measure layoffs, but net employment growth also depends on new hiring. Thus, claims correlate with payrolls, but the exact relationship varies.

The number receiving benefits is more of a "net" number than initial claims, but it too is better at signaling the tone than the exact magnitude of changes. One problem is individuals losing eligibility or being ineligible for benefits before finding a first job. This is mainly because many unemployed are new entrants to the labor force, not people who lost their jobs. Another problem is accounting for individuals hired from outside the pool receiving benefits, including new entrants into the labor force.

Personal income and consumption

Source: Bureau of Economic Analysis, Department of (www.bea.gov/bea/newsrel/pinewsrelease.htm)

Description: A monthly report of income and consumption of individuals as measured in the GDP accounts. Many of the data are available in inflation-adjusted as well as nominal dollars. The main components of personal income are wages and salaries (including pension fund contributions made by employees), personal interest and dividends, proprietors' income (earnings from unincorporated business and self employment, including farms), rental income of persons (including imputed rent of owner-occupied housing and net of upkeep costs such as mortgage payments), "other labor income" (including pension fund and health insurance contributions made by employers), and transfer payments (such as Social Security). Consumption consists of purchases of goods (durable and nondurable) and services. Another highlight of the report is the PCE chain price index, which has become widely regarded as perhaps the most reliable gauge of consumer inflation. In early 2000 the FOMC adopted the PCE price index (also see PCE price index section below) as its preferred measure of consumer inflation.

The report includes the personal saving rate; i.e., saving as a percent of disposable income. Disposable income is personal income minus tax payments. Saving is calculated as a residual: disposable income minus personal outlays, where outlays equal consumption plus nonmortgage personal interest payments plus net personal transfer payments to foreigners (personal remittances). Capital gains are not included in income or saving in the report

Timing: Released near the end of the following month, one day after the monthly update on GDP.

Seasonal/focus: The data are seasonally adjusted. Focus is on change from previous month in income, consumption, and the saving rate. Nominal income and consumption tend to be highlighted, although, in practice, the real figures are more important, particularly for consumption.

Revisions: Can be large. Usually the prior two months are revised. Historical data are revised once a year as part of the annual revision to GDP.

Comments: Consumption accounts for two-thirds of GDP, and income is the main determinant of consumption. The report provides limited new information, though. Except for services, much of the information on consumption is available earlier from unit motor vehicle sales and retail sales. Much of the information on income is available from the employment report.

Real disposable income

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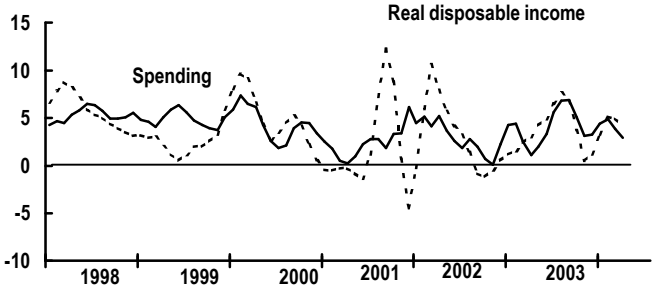


JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

Motor vehicle sales

Source: Individual auto makers; seasonal factors are provided by the Bureau of Economic Analysis (www.bea.gov)

Description: A monthly report of unit sales of new motor vehicles (including leases). Vehicles are divided into "light vehicles" (cars and light trucks) and medium and heavy trucks. They are further divided into imports and "domestics." Domestics include both foreign models assembled in the United States ("transplants") and vehicles assembled in Canada and Mexico for the US market.

Timing: Most manufacturers report sales of light vehicles on the first business day of the following month.

Seasonal/focus: Auto makers release the data in units sold. The BEA provides seasonal adjustment factors in advance of the release of monthly sales. Analysts use the seasonal factors and adjustments for working days in estimating sales. Official BEA data are released a few days later. Individual company results are also important for the equity market. Equity analysts tend to focus on oya changes for individual manufacturers.

Revisions: Annual revision only, when the seasonal factors are reestimated.

Comments: Vehicle sales have the advantages of being comprehensive (all sales are recorded, in contrast with retail sales, which are based on a small sample) and reliable, and of being available promptly. Users should be aware, however, that monthly auto sales can be heavily influenced by temporary sales incentives.

The unit figures are used by the BEA to estimate spending on motor vehicles in the GDP accounts (the auto portion of the retail sales report is not used). The figures reflect sales to businesses (counted in business investment in the GDP accounts) as well as to consumers. While vehicle production accounts for only 4% of GDP, it is one of the most cyclical parts of the economy.

Most companies announce their sales on the same day, but there is no set release time and individual reports are spread throughout the day. This results in continuous updating by analysts of the projected seasonally adjusted annual rate. Until all companies report, the estimated selling rate will depend on analysts' assumptions about the unreported data.

Retail sales

Source: Bureau of the Census, Department of (www.census.gov/svsd/www/fullpub.pdf)

Description: A monthly report of sales by retailers, including automobiles. Sales are reported in dollar terms. The data are classified by store type rather than actual products sold. For instance, the apparel component reflects total sales by stores concentrating in apparel, which may include some nonapparel items. And sales by department stores (part of the general merchandise category) include a broad range of goods, including apparel.

Composition of retail sales

% weighting, 2004	
Total retail sales	100
Nonauto retail sales	75
Vehicle dealers and parts	25
Automobile dealers	22
Furniture	3
Electronics and appliances	2
Building materials	9
Food and beverage	13
Health and personal care	5
Gasoline stations	8
Clothing	5
Sporting goods	2
General merchandise	13
Miscellaneous retailers	3
Nonstore retailers	5
Food services	9
General mdse. and clothing	17
Nonauto without gas	68
Nonauto ex bldg. materials	70

The automotive component does not correlate well with the unit sales figures (see above). In addition to being in dollars rather than units, the auto component of retail sales also includes used vehicles, parts, and nonauto goods sold by auto dealers, and it is based on the Census Bureau's own dealer survey rather than the total count of actual units reported by auto makers.

Timing: Released near the middle of the following month.

Seasonal/focus: The data are seasonally adjusted. Focus is on the monthly change in total and, especially, nonauto sales. Sales are adjusted for seasonality using the latest readings, so actual seasonal factors can be different from those that are initially published.

Revisions: Can be very large. Each report contains revisions to the previous two months and a change in the level of sales 12 and 13 months ago. The large revisions mainly reflect the limited sample available in time for the advance report. In the advance report, the Census Bureau selects 5000 firms whose sales are weighted and benchmarked to represent the complete universe of over 3 million retail and food service firms; 65% of firms respond to the advance survey. An additional 7,000 firms are added to the preliminary survey. 80% of the total 12,000 firms surveyed respond by the preliminary reading (2nd release for the month). The final release includes an additional 1% of the total 12,000 sample. In addition, sales are benchmarked each year in March to reflect the more comprehensive results from the latest Annual Retail Trade Survey and the latest Economic Census. Seasonal factors are reestimated at this time as well, and revisions are published for several years back. Response to the Annual Retail Trade Survey is

JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

required by law, which results in a completion rate of about 90% providing a more complete reading than the monthly surveys.

Comments: Retail sales account for about 40% of total consumer spending and 30% of GDP. Nonauto sales excluding building materials are used by the BEA to estimate nonauto goods consumption in the GDP accounts (building materials are excluded because they are reflected in construction spending). This component is also referred to as "retail control." As noted above, spending on motor vehicles in the GDP accounts is based on the unit figures; the retail sales figures are not used. Sales by restaurants are reported as food "services" in the retail sales report, but are counted as nondurable goods in the PCE series.

Weekly chain store sales

Source: ICSC-UBS and Redbook

Description: Two weekly surveys, by the ICSC-UBS and the Redbook, offer a timely preview of monthly retail sales.

The **Redbook** is a private survey of a sample of a dozen retailers, analogous to department stores in the retail sales report. Although the survey is weekly (covering sales through the prior Saturday), it generates an estimate of the monthly change, even as early as the first week of the month. That estimate is updated as the month proceeds. The month-to-month change is extrapolated from the percent change from a year ago, built around the historical relationship to the government's retail sales data.

The **ICSC-UBS** weekly chain store sales index is produced jointly by UBS equity research and the International Council of Shopping Centers. (The weekly index is separate from the monthly index published by the same group; see below.) Weekly sales are based on a sample of seven large retailers.

Timing: Reported on Tuesday each week, covering data through the prior retail week ending Saturday.

Seasonal/focus: Both the Redbook and ICSC-UBS data are seasonally adjusted.

Revisions: Estimates for the month are updated every week.

Comments: The data are used to predict the general merchandise and apparel component of retail sales, as they are released in a timely fashion, but both are highly volatile. Still, the weekly series are a useful guide to the tone and direction of nonauto retail sales as the month proceeds.

ICSC-UBS monthly chain store sales

Source: UBS equity research and the International Council of Shopping Centers

Description: An estimate of monthly chain store sales, made available before retailers publish their official sales figures. The survey is based on 11 retailers (with 79 chain stores), compared with seven for the weekly index.

Timing: Reported on the first Thursday of the following month. Months are retail fiscal months based on the National Retail Federation's 4-5-4 calendar (months alternate between four and five weeks duration) and may therefore start or end on different days than the corresponding calendar month.

Seasonal/focus: The data are reported as oya changes, but seasonally adjusted index levels are also made available.

Comments: The monthly series correlates better with oya changes in general merchandise and clothing sales than the weekly chain store sales data.

Consumer confidence surveys

Source: The Conference Board and the University of Michigan (two independent surveys).

Description: Two monthly private surveys of consumer sentiment are closely followed by the financial market. Each has a different questionnaire, but both are subdivided into responses on current conditions (called "present situation" by the Conference Board) and on expectations. Both surveys include five questions, three of them on expectations. (The questionnaires are described in the gray box, next page.)

In both surveys, the score for each question is based on the prevalence of positive versus negative responses (neutral responses are discarded), indexed to 1985=100 for the Conference Board and 1966=100 for the University of Michigan. The overall index is effectively an average of the five scores. The expectations subindexes are based on questions 2, 4, and 5 for the Conference Board, and questions 2, 3, and 4 for the University of Michigan.

In addition to the five questions for the overall index, a number of other questions are asked. The most noteworthy are on home buying and car buying attitudes, asking "is now a good time to buy?" in the Michigan survey, and whether respondents "plan to buy within the next six months" in the Conference Board survey. The correlation with actual home and car buying is much better for the Michigan results than the Conference Board results.

JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

Conference Board questions

1. How would you rate the present general business conditions in your area? Good, normal, or bad?

2. Six months from now, do you think they will be: better, the same, or worse?

3. What would you say about available jobs in your area right now? Plenty, not so many, or hard to get?

4. Six months from now, do you think there will be: more jobs, the same, or fewer jobs?

5. How would you guess your total family income to be six months from now: higher, same, or lower?

University of Michigan questions

1. We are interested in how people are getting along financially these days. Would you say that you (and your family living there) are better off or worse off financially than you were a year ago?

2. Now looking ahead, do you think that a year from now you (and your family living there) will be better off financially, worse off, or just about the same as now?

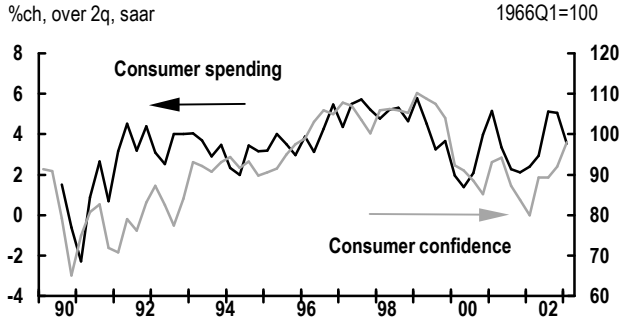
3. Now turning to business conditions in the country as a whole, do you think that during the next twelve months we'll have good times financially, bad times, or what?

4. Looking ahead, which would you say is more likely: that in the country as a whole we'll have continuous good times during the next five years or so, or that we will have periods of widespread unemployment or depression, or what?

5. About the big things people buy for their homes—such as furniture, a refrigerator, stove, television, things like that. Generally speaking, do you think now is a good or bad time to buy major household items?

One notable difference between the two surveys is the greater emphasis on labor market conditions in the Conference Board survey (two questions asking specifically about labor-market conditions compared with none in the Michigan survey). The survey methods are also different: the University of Michigan survey is based on around 500 telephone interviews each month, while the Conference Board survey is based on around 3,500 written questionnaires returned via mail (out of around 5,000 sent out). Despite the larger sample, the Conference Board measure is more volatile from month to month.

University of Michigan confidence vs real consumer spending

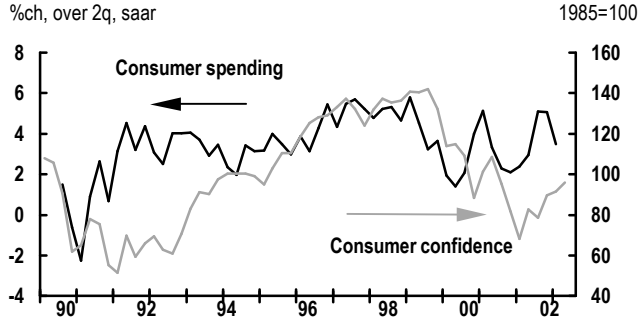


The University of Michigan sentiment index is released twice a month. The first release includes responses of about 300-350 participants. The final reading combines these responses with another 150 responses to reflect confidence for the whole month. Given the larger number of responses taken in the first half of the month major differences between the preliminary and final surveys are rare. In fact over the last 12 years the largest move was -3.8 points in July 1992. A large difference between the preliminary and final surveys would suggest a major shift in consumer perceptions during the month, as fewer responses are taken in the second half of the month.

Timing: The Conference Board index is usually released on the last Tuesday of the same month; most of the data are collected in the first 17 days of the month. The final University of Michigan reading is usually released on the last Friday of the same month (reflecting responses two days before the release), but a preliminary reading is usually released around halfway into the month, also on a Friday.

Seasonal/focus: Conference Board data are seasonally adjusted; University of Michigan data are not. But, the sea-

Conference Board confidence vs real consumer spending



JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

sonal factors in the Conference Board index are relatively small. Focus is on monthly changes in the overall indexes.

Revisions: Minor revisions are made to the Conference Board series, owing to the collection of additional responses between the 17th and the end of the month. Michigan series are not revised, except for the update between preliminary and final readings.

Comments: Confidence is a useful, but not a very accurate indicator of the change in spending on a month-to-month basis. Its greatest advantage is its timeliness. The expectations component of the Michigan index is included in the index of leading economic indicators.

The two series tend to move in the same direction over time. On a month-to-month basis, the two move in the same direction about two-thirds of the time.

Consumer credit

Source: Federal Reserve Board (www.federalreserve.gov/releases/G17/)

Description: A monthly report of aggregate consumer installment debt used to finance personal consumption. The data are reported as an outstanding stock of debt; changes measure net new debt incurred after repayments.

The main components are revolving credit (mainly credit card debt such as Visa or Master Card), and nonrevolvimg credit. Nonrevolving credit includes automobile loans as well as loans for other purposes such as mobile home purchases, education, or vacations. The figures include newly incurred credit card debt that is not accruing interest.

Detail is also provided on average interest rates charged for automobile or personal loans from commercial banks, as well as rates charged by credit card and automobile finance companies. Noninstallment credit, such as mortgages (including home-equity loans) are not included.

Timing: Usually released on the fifth working day of the second month following the reporting period.

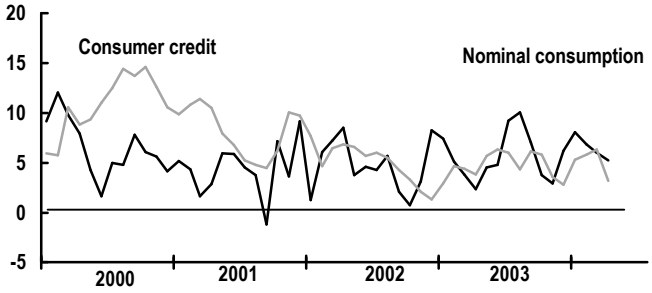
Seasonal/focus: The data are seasonally adjusted. Focus is on change from previous month in total credit outstanding.

Revisions: Large.

Comments: The correlation between credit growth and spending is poor on a month-to-month basis. Consumer credit is more useful as a tool for assessing household balance sheets than as an indicator or forecaster of economic activity on a month-to-month basis.

Nominal consumption and consumer credit

%ch, over 3 months, saar



Durable goods report

Source: Bureau of the Census, Department of Commerce (www.census.gov/indicator/www/m3/)

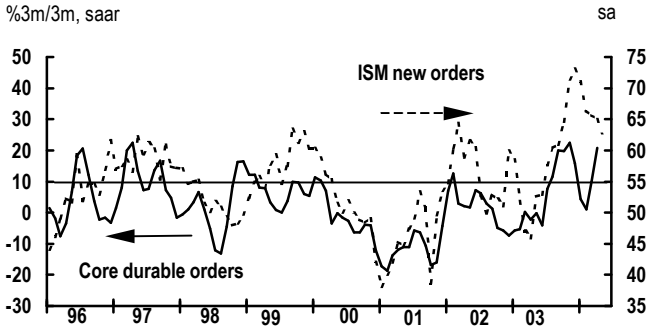
Description: A monthly report on durable goods activity at the manufacturing level, reported in current dollars. Durable goods are defined as those having a life expectancy of at least three years. New orders and unfilled orders are measured net of cancellations. The report is broken down by industry into: primary metals, fabricated metals, machinery, computers and electronic products, electrical equipment, transportation equipment, and all other durable goods. The data are also presented in analytical breakdowns, one of the most important being "capital goods." For purposes of this report, motor vehicles are not included in either capital or consumer durable goods (although purchases by businesses and individuals are included in business fixed investment and consumption, respectively, in the GDP accounts). Capital goods are listed as defense or nondefense, with nondefense further split between aircraft and all other. The data are not available by source of demand, such as foreign and domestic.

The data are based on survey responses from most manufacturing companies with $500 million or more in annual shipments, and from smaller companies in some industries, as appropriate. The survey includes about 3,500 units. Each individual company is given an industry classification, and all activity of that company is counted as being from that industry. The data are added up by industry and combined with the industry data from less frequent but more accurate benchmark surveys to produce monthly figures. The data reported by companies represent 60% of shipments in total manufacturing.

Shipment values are recorded at net selling price, after discounts and excluding freight charges and excise taxes.

JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

Core durable orders vs ISM new orders



Monthly shipments, order backlogs, and inventories are tabulated directly from the survey responses. New orders are derived as a residual (level of new orders equals level of shipments plus monthly change in level of backlog.) This is done because not all companies report new orders, and some only report new orders for specific products with long lead times in the production cycle. These companies, in effect, exclude new orders received for products that are shipped from current inventory; thus the technique used for estimating new orders guarantees inclusion of orders received and filled in the same month, orders received for future delivery, as well as the effects of cancellations and modifications of previously reported orders.

Timing: Released around the 25th of the following month

Seasonal/focus: The data are seasonally adjusted. Focus is on change from previous month in orders. Along with total orders, orders excluding defense, orders excluding transportation, and nondefense capital goods orders excluding aircraft are the aggregates paid most attention.

Revisions: Revisions as well as additional details are released about one week later in the factory orders report (which also includes information on nondurable goods, see below). Revisions are typically small relative to the monthly volatility of the series.

Comments: The volatility of the report lessens its usefulness (some call it the "doubtables" report). Multi-month trends in orders and shipments are often more revealing. However, even the trend over 3 to 6 months can be distorted by very large contracts that cause "lumpiness" in the series (surges in new orders, followed by steep declines). Distortions of the trend by such bunching tend to be severe in civilian aircraft and defense industries, which account for a large share of overall monthly volatility in durables, even though they account for only 8% of total new orders.

Despite these problems, the data are important, providing more of a sense of magnitude than ISM's qualitative information from purchasing managers, and also including compositional details including high-tech. In particular, the report is the main source of information on demand for capital goods, crucial for tracking investment trends. For this purpose, analysts watch orders and shipments in "core" durable goods industries, excluding civilian aircraft and military equipment. The durable goods report contains specific line items for new orders and for shipments ex transportation and ex military goods, but these provide only a partial solution to identifying core orders and shipments. (The nondefense series contains civilian aircraft, and the nontransportation series contains some defense goods but removes important data on motor vehicles.) Core new orders must be estimated using figures for military equipment in the tables of the durable goods report, and figures for civilian aircraft in the text of the report.

A second tool for overcoming volatility is to look at shipments, which are inherently less volatile than incoming orders. The volatility of new orders is exacerbated by the fact that they are calculated as a residual: they are not seasonally adjusted independently, but calculated from seasonally adjusted shipments and backlogs data. In theory, this should not present a problem, but in practice it tends to increase the volatility of new orders.

The only parts of the report that are directly used to estimate current-quarter GDP are shipments of nondefense capital goods (see definition below) excluding aircraft. These are used to estimate the nonmotor vehicle, nonaircraft parts of producers durable equipment spending (about two-thirds of producers' durable equipment, 6% of GDP), and inventories (used to estimate manufacturing inventories in GDP). Nonetheless, orders of nondefense capital goods excluding aircraft receive more attention than shipments, as they are more of a leading indicator. This category accounts for a little over 20% of total durable goods. While the other parts of the report are not directly incorporated in GDP, they are reflected indirectly in the various categories of spending.

Nondefense capital goods include: farm machinery and equipment; construction machinery; photographic equipment; metalworking machinery; turbines and generators; other power transmission equipment; material handling equipment; all other machinery; electronic computers; communications equipment; electromedical, measuring, and control instruments; electrical equipment; heavy duty trucks; aircraft; ships; office furniture; and medical equipment and supplies.

JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

Factory orders report

Source: Bureau of the Census, Department of Commerce (www.census.gov/indicator/www/m3/)

Description: A monthly report of the value of manufacturers' new orders, shipments, unfilled orders, and inventories of durable and nondurable goods. The data on durables are revised from the durable goods report released about one week earlier, with some added detail on industry groups. Nondurable goods include categories such as food products, tobacco products, textile products, paper products, chemical products, petroleum products, and rubber products. "New orders" are calculated in the same way as shipments in the case of nondurable goods. Analytical breakdowns are provided, such as: construction materials, capital goods, informational technology, motor vehicles, and consumer goods. All data are reported in dollars only (none in volume).

Timing: Released around the end of the following month, about one week after the durable goods report.

Seasonal/focus: The data are seasonally adjusted. Main focus is on change from previous month in orders and stocks.

Revisions: Small relative to the volatility of the series

Comments: Nondurable goods have less significance for the outlook than durables. They are less cyclical, and large swings often reflect changes in prices (such as for oil and food) rather than in volumes.

Construction spending

Source: Bureau of the Census, Department of Commerce (www.census.gov/const/www/c30index.html)

Description: A monthly report of the nominal value of construction put in place. The format of the report was changed on August 1, 2003. Total spending is classified into private and public sector outlays, each further divided into residential and nonresidential building. Private residential construction spending accounts for 49% of total spending. Nonresidential construction spending (public and private) is broken down into several major subgroups by intended use: lodging, office, commerce, health care, education, recreation, transportation, communication, power, and manufacturing. Public construction spending also includes outlays for sewage plants, water supply, and conservation.

Timing: Released early in the second month following the reporting period.

Seasonal/focus: The data are seasonally adjusted. The report highlights the change from the previous month in total nominal spending.

Revisions: Can be large. Typically the prior two months are revised.

Comments: The data receive much less attention in the financial markets than home sales or starts, as residential spending lags those data (it typically takes six months to build a house), and the nonresidential and public components are extremely volatile. However, the report is important for adding up the construction components of current-quarter GDP. Construction accounts for about 9% of GDP (4% residential, 3% nonresidential, and 2% public), but usually accounts for a larger share of fluctuations from quarter to quarter.

Housing starts and permits

Source: Bureau of the Census, Department of Commerce (www.census.gov/const/www/newresconstindex.html)

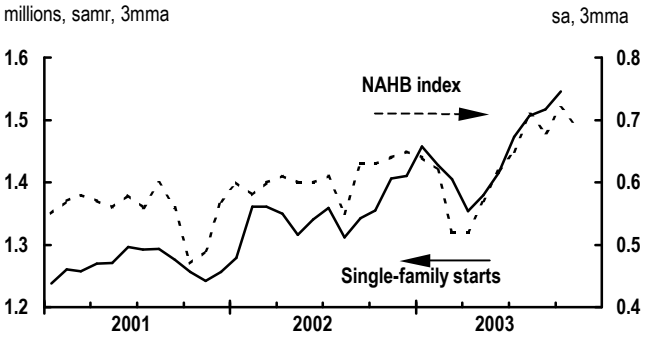
Description: A monthly report of starts and permits (permits being authorizations of starts by local building authorities) of new housing units, in both single-family and multifamily buildings. Each unit in a multifamily building is counted separately. "Starts" include housing units that are being totally rebuilt on an existing foundation. Starts usually exceed permits: even though not every permit results in a start, this is more than offset by the fact that some areas do not require permits. Most starts follow permits within the same month. At a more detailed level, the report tracks five stages of construction: 1) permits, 2) permits issued but not yet resulting in a start, 3) starts, 4) total units under construction, and 5) completions.

Timing: Released around the middle of the following month.

Seasonal/focus: The data are seasonally adjusted. Focus is on change from previous month, with starts receiving more attention than permits.

Revisions: Usually modest.

NAHB housing market index vs single-family starts



JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

Comments: New housing is only about 4% of GDP, but it is one of the most cyclical and interest-rate-sensitive parts of the economy. Starts and permits are leading indicators of residential construction spending over the next six months (the building time for a typical house). Although starts typically get more attention than permits, permits are less volatile, as they are less subject to weather distortions. Permits are included in the index of leading indicators. The single-family component of starts and permits is more heavily weighted, and much less volatile than the multifamily component.

New home sales

Source: Bureau of the Census, Department of Commerce (www.census.gov/const/www/newressalesindex.html)

Description: A monthly report of the number of sales of new single-family homes recorded at the time of the initial contract agreement (in contrast to existing home sales, see below). Sales are subdivided into four regions: the Northeast, the Midwest, the South, and the West. Also published are the median and average price of homes sold, the outstanding stock of houses for sale, and the number of months' supply of unsold homes at the latest sales rate.

Timing: Released around the end of the following month.

Seasonal/focus: The data are seasonally adjusted. Focus is on the monthly change in total sales.

Revisions: Can be large.

Comments: Although only about 2.5% of GDP, single-family home-building is a highly cyclical and interest-rate-sensitive part of the economy. In theory, new home sales should be far more important than other government reports on housing, as sales set the trend for starts, and starts lead actual construction spending. However, their volatility, including large revisions, results in the starts and permits figures' being just as important. And, unless inventories are unusually high, the lag between sales and starts is often quite short.

Mortgage applications

Source: Mortgage Bankers' Association (www.mortgagebankers.org/marketdata/)

Description: Weekly indices that track the number of applications for new mortgages. The data are subdivided into applications for purchasing a house and for refinancing an existing mortgage. The purchase data are a timely indicator of home demand but do not distinguish between applications for new or existing homes. The refi index is mainly an indicator of general household cash flow: increased refis imply increased spending power. (During the refinancing boom of 2001-03, consumers used much of their cash-out refis to pay down consumer debt.) The indices are derived from a survey accounting for 40% of all retail mortgage applications of all mortgage originators.

Timing: Reported each week on Wednesday morning, covering the week ended the prior Saturday.

Seasonal/focus: The data are seasonally adjusted. Focus is on seasonally adjusted change from previous week in applications for purchase.

Revisions: Minor.

Comments: The purchase data are volatile from week to week, but the smoothed figures have shown a fairly strong correlation with home sales, both new and existing. The biggest advantage of the report is its timeliness.

Existing home sales

Source: National Association of Realtors (NAR) (http://www.realtor.org)

Description: A private report on *the number of* sales of previously owned single-family homes. The data are based entirely on contract closings. This is different from the series on new home sales, which is entirely based on initial agreements. As a result, the existing-homes data lag the new-homes data by about a month. Sales are subdivided regionally as with new home sales (above). Also published are the average and median sales price, the number of unsold homes on the market, and the number of months' supply at the latest sales rate.

Timing: Released near the end of the following month.

Seasonal/focus: The data are seasonally adjusted. Focus is on the monthly change in total sales.

Revisions: Minor.

Comments: Existing home sales are much less important as an economic indicator than new homes sales. Although housing turnover generates spending on commissions, moving expenses, and redecorating, the impact on GDP is tiny compared with construction activity in the new housing market.

JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

Housing market index

Source: National Association of Homebuilders (www.nahb.org)

Description: A report from a private monthly survey, whose main indicator is a "housing market index" based on builders' perceptions of the market for new single-family housing. The index is calculated from three components: current home sales, expected home sales over the next six months, and traffic of prospective home buyers. Builders are asked to rate each component as "good," "fair," or "poor" ("high," "average," or "low" in the case of traffic). Index levels are derived as the percent saying "good" minus the percent "poor" plus 50, with the result divided by 2 to give a neutral value of 50. The composite "housing market index" puts a 59% weight on current sales, 14% on expected sales, and 27% on traffic. The index is the housing equivalent of the ISM manufacturing survey.

Timing: Reported around the middle of the reference month, usually the day before starts are released. The data typically reflect responses over the previous couple of weeks.

Seasonal/focus: The data are seasonally adjusted. Focus is on monthly change in housing market index.

Revisions: Minor.

Comments: Little market attention is paid to the index but it is useful in tracking other housing indicators. The early release of the report is another positive feature.

International trade

Source: Bureau of the Census, Department of Commerce (www.census.gov/foreign-trade/www/press.html)

Description: A monthly report of imports and exports (and balance) of goods (merchandise) and services. Goods are classified according to six main categories: food, feed, and beverages; industrial supplies and materials; nonautomotive capital goods; automotive vehicles and parts; nonauto consumer goods; and "other." Services are classified as: travel; passenger fares; other transportation; royalties and license fees; direct defense expenditures; and "other." More detailed breakdowns are also available.

Census data on the main goods categories are provided in both current and inflation-adjusted dollars. The price adjustment is based on the monthly report of import and export prices. Both values and prices of goods trade are from customs clearance data. Services data are in current dollars only and are from quarterly, annual, and benchmark surveys, as well as monthly data from certain industries. Data for nominal goods trade are broken down by country; other data are not. Commodity and country details are on a census basis, but the aggregate trade balance figure that is highlighted in the report shows both goods and services on a balance of payments basis—incorporating additional adjustments to the census data to bring them in line with the concepts and definitions of the US international and national accounts.

Timing: Released around the middle of the second month following the reporting period. This is one of the few reports that the US releases later than many other countries.

Seasonal/focus: Aggregate figures, as well as some categories, are seasonally adjusted; regional data are not. The focus is on monthly changes in total nominal exports, imports and the balance.

Revisions: Can be sizable.

Comments: In general, high exports and high imports are interpreted as reflecting a strong economy, and low exports and imports a weaker one. In practice, it is the monthly export numbers that are more informative, since imports tend to follow trends in domestic spending, for which there are more timely releases available. Imports usually lag domestic spending, with short-term divergences reflected in inventories. Both exports and imports are volatile from month to month, though, limiting the reliability of any single report.

Exports and imports account for about 10% and 14% of GDP, respectively (7% and 11% for goods trade alone). Exports and imports in the GDP accounts are close to, but not identical to, the figures in the monthly report. (For instance, goods exports in the GDP accounts exclude nonmonetary gold, which are included in the monthly data.)

Given the late release of these trade data, the advance estimate of GDP incorporates an assumption about trade in the third month of the quarter. The difference between actual and the assumed net exports is typically a key determinant of the first revision of GDP.

Balance of payments/ current account

Source: Bureau of Economic Analysis, Department of Commerce (www.bea.gov/bea/di/home/bop.htm)

Description: A quarterly report of international current and capital flows in US dollars. In addition to the exports and imports of goods and services already covered by the monthly report, the quarterly current account includes in-

JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

vestment income flows and nonmilitary transfers (including official foreign aid and workers' remittances).

Timing: Released about two and half months after the end of the quarter.

Seasonal/focus: The current account data are seasonally adjusted; the capital accounts are not. The market's main focus is on the overall current account balance, although the composition of international private capital flows is also of interest for analyzing trends in the fx and capital markets.

Composition of the PPI

% weighting, 2004

Producer prices	100.0
Core	64.4
Food	14.9
Energy	20.6
Autos	5.1
Trucks	5.7
Computers	0.5
Tobacco	3.5
Prescription drugs	2.9
Light fuel oils	0.6
Gasoline	2.7
Electric power	7.0
Natural gas	3.5
PPI intermediate	
Core	79.6
PPI crude	
Core	19.2

Revisions: Modest.

Comments: The current account balance is generally well anticipated, since most of the data are available previously in the monthly trade report. The capital flows data would be of significant interest to the markets if they were available on a more timely basis. Because of the long lag, though, they are largely ignored.

Producer price index (PPI)

Source: Bureau of Labor Statistics, Department of (www.bls.gov/news.release/ppi.toc.htm)

Description: Monthly indices of prices received by domestic producers, based on a survey from 30,000 reporters. Nearly all establishments report prices through the mail. The report mainly covers output of the manufacturing sector, but also included are mines, gas and electric utilities, farms, and—increasingly—service providers. However, the aggregate finished goods (released first as the headline number and most important from a market perspective), intermediate, and crude PPIs are for manufacturing goods only. The report includes three sets of fixed-weight indices, broken down by: (a) stage of processing, (b) commodity group, and (c) industry. The focus is almost exclusively on the stage of processing data, which, in turn, are divided into crude, intermediate, and finished goods:

Crude goods are commodities that have not yet been manufactured or processed in any way; examples include wheat, raw cotton, and copper. **Intermediate goods** have gone through some processing and either require additional processing (such as flour and cotton yarn) or have been completed but will be used as an input to another product (such as paper boxes and containers and engines and parts). **Finished goods** represent completed products ready for sale to the final user, whether an individual consumer or a business. They are divided into consumer goods and capital goods. Examples of capital goods include computers, machine tools, trucks, and airplanes. Examples of consumer goods include apparel, furniture, cars, and foodstuffs such as bread (to continue the wheat to flour example above). Although the finished goods index primarily reflects products that have gone through a manufacturing process, a notable exception is the inclusion of some unprocessed food items: such as eggs and fresh fruits. "Core" PPI indices (excluding food and energy) are published for each of the three stages of processing.

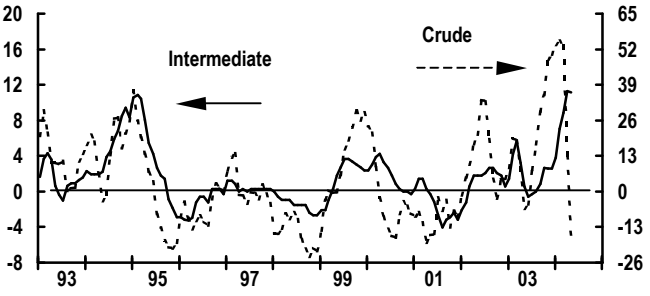
The price indices by **commodity group** are largely ignored in the United States—although the "all commodities" index is the series that most closely resembles the PPI in most other countries. It covers a combination of crude, intermediate, and finished goods. One reason why this series is not favored in the US is the bias caused by double-counting of products that go through several stages of production.

The price indices by **industry group** receive even less attention. These include information on manufacturing and mining industries, and increasingly on service industries.

The PPI data only measure prices received by domestic producers. Imported goods are excluded—although they are of course reflected indirectly to the extent that they are used as inputs, and to the extent that higher (lower) prices for imported goods lessen (increase) competition for domestic producers, implying more (less) scope for raising prices. The data exclude sales taxes (in contrast to the CPI), as the purpose is to measure net prices received by producers. Equivalently, rebate programs and other sales promotions are included to the extent that they affect the net proceeds of producers.

Core crude and intermediate PPI

%ch, from 3 months ago, both scales



JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

Timing: The indices generally reflect prices in the first half of the month (the Tuesday of the week including the 13th is the sample day for a number of items); they are released just before the middle of the following month.

Seasonal/focus: The data are seasonally adjusted. Focus is on the monthly change, with total and core finished goods and core intermediate goods receiving the most attention.

Revisions: Minor. Monthly readings are revised with a four-month lag. Seasonal factors are reestimated annually, with revisions incorporated in the January report.

Comments: The finished goods index is the most important monthly indicator of domestic goods price inflation, with the core generally viewed as a better measure of the trend from month to month. Core intermediate goods prices tend to lead core finished goods prices.

The importance of the crude index is lessened by the more timely release of other information on commodity prices—such as the materials price index in the purchasing managers survey, and daily exchange-traded contract prices for some of the main individual commodities, and their indices.

Producer price inflation is only one of several factors that influence consumer price inflation. Prices of consumer goods in the finished goods PPI are sometimes effective in signaling the direction and magnitude of goods prices in the CPI. But service prices in the CPI reflect other factors such as rent and labor costs and profit margins in the wholesale and retail sectors. In addition, import prices are directly reflected in the CPI. Starting in February 2004 the BLS began using the NAICS classification system in its breakdown by industry.

Consumer price index

Source: Bureau of Labor Statistics, Department of Labor (www.bls.gov/news.release/cpi.toc.htm)

Description: Monthly fixed-weight indices of prices at the consumer level for a basket of goods and services intended to represent a typical household's spending pattern. The weights used are based on "out of pocket" expenditures as measured by annual Consumer Expenditure Survey, conducted by the BLS. The current weights (starting with January 2002 data) reflect expenditure patterns in the 1999-2000 period. Weights are to be updated every two years (previously every 10 years). The price indices for more than 200 individual CPI components are based on a sample of about 80,000 items, collected each month from thousands of retail stores, service establishments, rental units, and doctors' offices across the country. A "core" CPI is provided that excludes the volatile food and energy components. The weight of services is even larger in the core CPI than in the overall CPI (69% versus 57%).

Composition of the CPI

% weighting, 2004

Consumer prices	100.0
Core	78.7
Food	14.6
Energy	6.7
Services	59.2
Core	55.8
Owners' equiv rent	22.2
New vehicles	4.9
Gasoline	3.1
Medical care	6.0
Recreation	5.9
Education	5.8
Other	4.4
Tobacco	1.0
Goods	40.8
Core	22.9
Services	59.2
Core	55.8

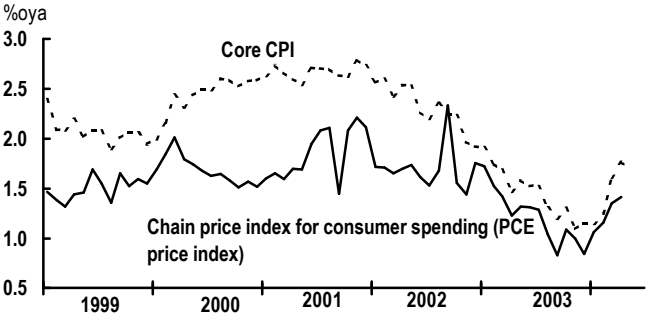
The report is designed to measure prices actually paid by consumers. As a result, all sales taxes and rebates are included. However, no adjustments are made for coupons unless they are attached to the product for immediate redemption. Before 1983, the CPI used to include mortgage rates and home prices as part of the "shelter" component. Since 1983, shelter has been based on rental rates, including rental rates for owner-occupied housing, as well as actual residential rental rates and hotel and motel lodging fees. All are based on rental-market surveys. The owners' equivalent rent series reweights the rental market surveys to reflect owner-occupied units (that is, the rent that an owner would receive from renting his home in the competitive market).

Import prices are implicitly included (in contrast with the PPI), since the CPI measures all prices paid by consumers. As a rule of thumb, a 10% drop in the value of the dollar on a trade-weighted basis adds about 0.5% to the CPI over the following year. (This is only half what would be expected if there were 100% passthrough, reflecting the fact that about half the impact is typically absorbed in profit margins.)

The report actually includes two similar, but separate, indices: the CPI-U and the CPI-W. The CPI-U is the more closely followed of the two and its NSA index level is used in calculating the inflation component of TIPS (Treasury Inflation Protected Securities) carry. It is designed to reflect typical spending patterns for "all urban consumers," representing the approximately 80% of the population living near urban centers. (It is the CPI-U that is reported in the press and covered in the *Global Data Watch.)* The CPI-W, the older of the two measures, is designed to reflect spending patterns of "all urban wage earners and clerical workers"; it is used as the basis for cost of living adjustments. The CPI-

JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

Core PCE price index vs core CPI



W is based on 32% of the population and is geared toward a labor classification: the sample used to estimate spending patterns excludes professional, managerial, and technical workers, the self-employed, the unemployed, retirees, and others not in the labor force. Despite the different target groups, results from the two series are almost identical.

Timing: Prices are measured on a full-month basis (that is, the sampling is spread throughout the month). The release date is just before the middle of the following month.

Seasonal/focus: The data are seasonally adjusted. Focus is on the monthly change in total and core prices.

Revisions: Seasonal factors are reestimated annually, with revisions incorporated in the January report. Data are revised going back five years. The seasonally unadjusted data are not revised. This avoids legal complications, as many contracts (such as for wages or rents) are linked to the not seasonally adjusted CPI. Cost-of-living adjustments (COLAs) for federal transfer payments (such as Social Security), income tax brackets, and congressional salaries are also indexed to the CPI.

Comments: Historically, the CPI was viewed as "the" measure of inflation, but for policy purposes it has recently ceded some ground to the PCE price index (see below).

In August 2002 the BLS began publishing a chain weighted (Fisher formula) "CPI superlative." This new measure is intended to help eliminate the substitution bias that arises from the CPI's underlying assumption that weights are fixed across categories. A fixed-weight index overstates the rise in cost of living because it does not reflect consumers' ability to substitute across categories of goods—in particular, from items exhibiting higher inflation to those whose prices are rising less or are falling.

PCE price index

Source: Bureau of Economic Analysis (BEA), Department of Commerce (http://www.bea.gov)

Description: The PCE price index is the Fed's preferred measure of inflation. This stance was made public in February 2000, when Fed Chairman Greenspan indicated in his semi-annual testimony to Congress that the FOMC would begin framing its inflation forecasts in terms of the core PCE price index rather than the core CPI. The PCE price index (sometimes called the core chain price index for consumer spending PCEPI) is constructed using the "chain-weighting formula," which averages two fixed-weight price indexes (see terminology and concepts section). This allows for changes in the basket of goods and services purchased by consumers, avoiding the substitution bias that affects the CPI.

Timing: Prices are measured on a full-month basis. The data are released near the end of the month along with the personal consumer spending report.

Seasonal/focus: : The data are seasonally adjusted. Focus is on the monthly change in total and core prices.

Revisions: Usually the prior two months are revised.

Comments: The PCE price index also includes prices for certain items that consumers obtain without explicit charge. For example, the PCE price index includes imputed prices for free financial services, such as checking accounts and the use of ATM machines that are provided without charge. Some officials at the Fed have questioned the use of imputed prices (which consumers do not see) in the CPI, and others think that the procedures for calculating imputed prices are flawed. Therefore, the BEA also produces a PCE index without imputed items (such as free financial services), which is made available on its Web site and called the "market-based PCE price index."

This closely followed PCE price index is almost, but not quite equivalent to the PCE deflator. The deflator is the ratio of aggregate current dollar consumer spending to the aggregate chain-weighted measure of real consumer spending (which is calculated using the chain price index for consumer spending see www.bea.gov/bea/ARTICLES/2003/11November/1103%20Chain-dollar.pdf). The price index, in contrast, is built up from a similar measure for individual components using a chain-weighting procedure.

To summarize the comparison between the CPI and PCE price indices, the two series differ in formula, scope, weights, and revisions:

JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

- **Formula.** The BLS constructs the CPI as a fixed-weight average of prices for individual goods and services, based on the Laspeyres formula. The BEA constructs the PCE price index with a chain-weight Fisher ideal formula, which averages two fixed weight price indexes.
- **Coverage.** The PCE price index refers to spending on goods and services by US residents, and nonprofit institutions. The PCE price index includes consumption funded by the government. Thus, for example, the PCE price for medical services includes the price paid for services through the government's Medicare and Medicaid programs and by employer-financed health insurance. The CPI, on the other hand, is designed to approximate the typical urban consumer's cost of living; thus it covers only out of pocket expenses. About 25% of PCE spending lies outside the CPI (such as medical care payments covered through employer or government-financed insurance plans, and financial services that are provided without explicit charge).
- **Weights.** The weights in the CPI are expenditure shares derived from the BLS's biennial Consumer Expenditure Survey. The weights in the PCE price index are derived from expenditure shares in the national accounts. The weights in the CPI and PCE price index differ most for housing and medical care. Owners' equivalent rent has a weight of more than 20% in the CPI, but only 11% in the PCE price index. Medical services have a 15% weight in the PCE price index compared to 4% in the CPI.
- **Revisions.** The PCE price index is revised to reflect more complete source data that become available after the first release.

Productivity and costs

Source: Bureau of Labor Statistics, Department of (www.bls.gov/news.release/prod2.toc.htm)

Description: Quarterly indices of output per hour (productivity), compensation per hour, and labor cost per unit of output (unit labor cost). The main data cover the nonfarm business sector (about 77% of GDP); excluded from this calculation are the farm sector, paid employees of private households, the government sector, nonprofit institutions, and imputed rent from owner-occupied housing (included in services consumption in the GDP accounts). Nonfarm business output is more cyclical than overall GDP. The hours-worked figures have broader coverage, including employees as well as the self-employed. Similarly, the compensation data include income of the self-employed. In addition to the figures on the nonfarm business sector, details are also available for the total business (including farms), manufacturing, and nonfinancial corporate sectors.

Productivity is defined as total output divided by total hours worked. Unit labor cost is equal to total labor costs (wages and benefits) divided by total output. (Or, equivalently, labor cost per hour divided by output per hour.) Consequently, unit labor cost depends on both productivity and compensation: the rate of increase in unit labor cost is approximately the rate of increase in compensation minus the rate of increase in productivity. For instance, if labor cost inflation is 4% and productivity growth is 1%, unit labor cost inflation is 3%.

Timing: The initial report is released about five weeks after the end of the quarter (about a week after the advance GDP report). Revised data are released one month later (after the preliminary GDP report). Revisions in the final GDP report are not reflected until the initial productivity report for the following quarter.

Seasonal/focus: The data are seasonally adjusted. Focus is on the change from the previous quarter, especially nonfarm business productivity and unit labor cost.

Revisions: Can be large, depending on revisions to GDP.

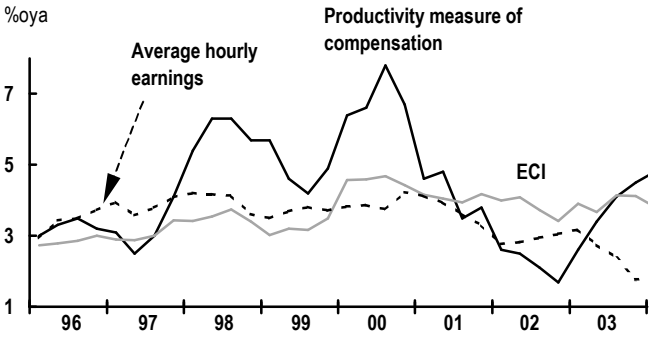
Comments: Quarterly readings can be highly volatile. Over time, though, unit labor costs are a major determinant of overall goods and services price inflation as labor costs account for about two-thirds of all production costs. Higher production costs are either passed on in higher prices or absorbed in lower profit margins.

Employment cost index

Source: Bureau of Labor Statistics, Department of (www.bls.gov/news.release/eci.toc.htm)

Description: A quarterly fixed-weight index measuring employee compensation costs per hour—including wages and salaries and employer's cost for employee benefits—in the

Compensation costs



JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

private and state and local government sectors. Wages and salaries include commissions and bonuses that are directly linked to output but do not include premium pay for overtime (only straight-time earnings). Benefits include the cost to employers of health insurance, retirement and savings plans, legally required benefits (such as contributions for social security, workers' compensation, and unemployment insurance), lump-sum payments and bonuses that are not directly linked to output, and premium pay for overtime. Benefits account for about 30% of the index. The ECI provides various levels of detail by industry. There are 500 occupations in the ECI employment basket. The weight for each occupation is based on 1990 employment counts, primarily from the BLS's Occupational Employment Statistics. Data are collected from a probability sample of approximately 36,200 occupational observations within about 8,300 sample establishments in private industry, and approximately 3,600 occupations within about 800 sample establishments.

Timing: Data cover the pay periods including the 12th day in March, June, September, and December. They are released at the end of the month following the reference quarter.

Seasonal/focus: Data are now seasonally adjusted, although the focus still tends to be on the change from a year earlier, for both the total as well as wages and salaries alone.

Revisions: Minor.

Comments: Although the ECI is reported later and less frequently than average hourly earnings in the employment report, it is a much more comprehensive and reliable measure of labor costs in that it includes benefits as well as wages; it covers 98% of payroll employment (all except federal government), compared with about 68% coverage in average hourly earnings (average hourly earnings only cover private production and nonsupervisory workers); and its fixed-weight structure prevents distortions due to shifts among occupations and industries. Over time, the trends in average hourly earnings and wages and salaries in the ECI tend to be similar, though. Labor costs account for about two-thirds of all production costs in the economy.

Import and export prices

Source: Bureau of Labor Statistics, Department of Labor (www.bls.gov/news.release/ximpim.toc.htm)

Description: Monthly fixed-weight indices of import and export prices of commodities (there are some services such as air fares). All indices use a modified Laspeyres formula. The fixed weights are based on US export and import values in the base year (2000). The report also includes a breakdown by country of destination or origin. The International Price Program (IPP) samples establishments based upon the relative value of their imports and exports during the year. Establishments are asked to provide the IPP with prices for as close to the first day of the reference month as possible. The majority of prices used in calculating import prices are f.o.b. and the majority of prices used to calculate export prices are f.a.s. (free on board, and free alongside ship—see standards and classifications section)

Timing: Released near the end of the following month. The data generally reflect transactions completed during the first week of the month.

Seasonal/focus: The data are not yet seasonally adjusted, putting the focus on the change from a year earlier. Since the main interest in the report is for gauging whether fluctuations in the dollar are affecting inflation, import prices receive more attention than export prices. In particular, the auto and nonauto consumer goods components are the best indicators of currency effects on consumer prices, as the overall number tends to be dominated by swings in commodity prices (rather than currency movements alone).

Revisions: Minor.

Comments: Import prices reflect changes in the prices paid by importers, which are not always passed on to domestic consumers (and the CPI does not distinguish between imports and domestic items). Nonetheless, the report is a good indicator of imported price pressures.

Monetary aggregates

Source: Federal Reserve Board.http:(www.federalreserve.gov/releases/h6/)

Description: A weekly report (Fed's weekly H.6 report). In

Monetary aggregates

M1	=	M1 includes currency (held outside the vaults of depository institutions), nonbank travelers checks, and demand and other checkable deposits (except demand deposits due to the Treasury and depository institutions), minus cash items in the process of collection and Federal Reserve float.
M2	=	M2 includes M1 plus savings deposits (including money market deposit accounts) and small-denomination (less than 100,000 or more) time deposits issued by financial institutions; and shares in retail money market mutual funds (funds with initial investments of less than $50,000), net of retirement funds.
M3	=	M2 plus large time deposits (100,000), repurchase agreements issued by depository institutions, eurodollar deposits, specifically dollar-denominated deposits due to nonbank US addresses held at foreign offices of US banks worldwide and all banking offices in Canada and the United Kingdom; and institutional money market funds (funds with initial investments of $50,000 or more).
L	=	M3 plus eurodollar deposits, US government savings bonds, bankers' acceptances, commercial paper, and short-term treasuries (less than 12 months).

JPMorgan Chase Bank, New York
Jayanth Nazareth (1-212) 834-5310
Jayanth.nazareth@jpmorgan.com

addition to M1, M2, and M3 aggregates (table). Two other measures receive attention. MZM (Money, Zero, Maturity) consists of M2, excluding small-denomination time deposits, plus institutional money market funds. L (Liquid Assets) includes longer-term Eurodollar deposits, US government savings bonds, bankers' acceptances, commercial paper, and short-term treasuries.

Timing: Reported weekly, with a 10-day lag.

Seasonal/focus: Data are seasonally adjusted. The focus is on weekly changes, especially in M2. The data receive less attention from policymakers and markets than in the past.

Revisions: The latest two weeks' data are considered preliminary estimates. Minor revisions are made to historical data.

Comments: The aggregates have faded in importance in recent years as their link to nominal GDP has broken down.

Federal budget

Source: US Treasury

Description: A monthly statement of federal receipts and outlays (formally called the Monthly Treasury Statement). The deficit in the report is known as the unified budget deficit: it encompasses all federal activities including receipts and outlays of the social security trust funds and the net balance of the Postal Service (although these two portions are officially listed as "off-budget"). All items are on a cash basis except interest, which is on an accrual basis. The fiscal year runs from October through September (as an example, fiscal 2004 started on October 1, 2003).

Timing: Measured monthly, released around the 15th working day of the following month. The exception is the September report, the last of the fiscal year, which is usually delayed a week or two.

Seasonal/focus: The data are not seasonally adjusted, so the focus is on the change in the balance from a year earlier.

Revisions: Minor

Comments: The budget results determine the Treasury's financing needs. But, with much of the information released previously in the Daily Treasury Statement (published with just a one-day lag), the monthly statement has limited new information for the financial markets. The monthly budget numbers fluctuate significantly, mainly reflecting the uneven timing of interest outlays and individual and corporate nonwithheld tax payments and refunds. The concentration of nonwithheld tax payments typically results in a budget surplus in January, April, June, and September.

An alternative measure of the federal deficit is published in the national income accounts (with quarterly GDP). Along with some timing differences (such as counting tax receipts on an accrual rather than a cash basis), a key difference between the two measures is the treatment of financial transactions. In the national income accounts, financial transactions that involve the transfer of existing assets and liabilities and do not contribute to current income and production are excluded. A notable example in recent years has been the bailout of failed savings and loans (counted under deposit insurance outlays in the unified budget).

JPMorgan Chase Bank, London
Silvia Pepino (44-20) 7325-4250
silvia.pepino@jpmorgan.com

Euro area

The monthly data cycle

Same month	Following month	Second following month
	First third	**First third**
	Manufacturing PMI	Euro area PPI
	Services PMI	Euro area unemployment
	Germany unemployment	Euro area retail sales
		Germany IP
		Germany mfg orders
		Germany retail sales
Middle third	**Middle third**	**Middle third**
ECB Monthly bulletin	Euro area HICP	Euro area IP
	France CPI prelim	
Final third	**Final third**	**Final third**
Euro area flash HICP	Euro area monetary aggregates	Euro area current account
Germany states CPI	French unemployment	Euro area foreign trade
Italy cities CPI	France consump mfg prod	Euro area industrial orders
	Euro area EC survey	Germany PPI
		Germany IFO survey
Germany ZEW survey		
Belgium BNB survey		

The quarterly data cycle

Following month	Second following month	Third following month
	Euro area GDP flash	Euro area GDP
	Germany GDP flash	Italy GDP
	Germany GDP	
	France GDP flash	
	France GDP	
	Italy GDP flash	

JPMorgan Chase Bank, London
Silvia Pepino (44-20) 7325-4250
silvia.pepino@jpmorgan.com

Overview: data watching in the Euro area

The unique structure of the Euro area, an economic region that is not a single political entity, means that data-watching presents anomalies compared to other OECD economies.

Focus on areawide developments. Since the launch of EMU in 1999, when a single central bank in charge of setting interest rates for the whole of the Euro area was created, the focus of attention has shifted away from country-specific news towards regionwide developments. In the current system, the national statistics offices of the 12 member states collect and publish national statistics, which are then aggregated in areawide format by Eurostat, the statistical arm of the European Union. The new institutional setting has required the development of a system of statistics that refer to the region as a whole and a massive effort of harmonization of national statistics.

Issues of data availability. Since 1999, the statistics covering economic conditions in the region have multiplied, and improved significantly in quality and timeliness. National statistics have become noticeably more comparable than before, although there remain significant differences.

Still, the areawide data remain incomplete, in addition to being made available with considerable delay. For example, domestic demand determines more than 80% of Euro area GDP, but timely statistics are scarce on the state of demand in the region as a whole. Hence, industrial activity data—from qualitative business surveys as well as actual magnitudes—provide the key information on the Euro area business cycle, even though industry accounts for less than 30% of GDP. These data are timely, and of far higher quality than those available for other sectors

The continuing process of improvement has created an extremely fluid situation in terms of data availability and reliability. For example, a new aggregate of areawide industrial orders, previously nonexistent, was introduced at the end of 2003. And incremental changes in the definition in unemployment or the labor force in one country or the other make the aggregate unemployment rate hard to interpret.

Separating the forest from the trees. A consequence of this evolving system is that an enormous amount of data is published each month. For example, for consumer prices, a total of 26 different data points are released each month: 12 national CPIs (one for each member state), 12 harmonized HICP indices, the areawide HICP, and a flash estimate of areawide HICP. Trying to follow all the data published across the region would make it very hard to separate the forest from the trees. In general, it is useful to focus on a limited number of key releases and look at each of them as adding a new piece to the areawide jigsaw. Indeed, the Eurostat aggregates are mostly old news to the market by the time they are published.

It is important to keep in mind that the three largest economies—Germany, France, and Italy—represent three-quarters of the Euro area's GDP. As a result, focussing on the information provided by these countries normally provides a good enough sense of developments in the region as a whole. Add Spain and the Netherlands, and nearly 90% of regional activity is covered.

This *Handbook* covers the key indicators that JPMorgan finds it useful to focus on. Taken together, these statistics provide a good overview of conditions across the region.

Data sources. A large number of institutions are involved in the production and publication of Euro area data, from national statistics offices, central banks and research institutes to European institutions (Eurostat, the European Central Bank, the European Commission). In order to provide a guide into the maze, a list of the main bodies and their web sites is provided at the end of this section.

JPMorgan Chase Bank, London
Silvia Pepino (44-20) 7325-4250
silvia.pepino@jpmorgan.com

Gross domestic product

Source: Eurostat and national statistics offices.

Description: Eurostat's estimate of GDP is based on the national GDP readings, rather than Eurostat's monthly indicators of industrial production and retail sales. This is important because there are sometimes divergences between Eurostat's estimates of industrial production and retail sales and aggregates of the national indicators, owing to differences in seasonal, working-day, and shopping-day adjustments. Eurostat produces a flash estimate of areawide GDP based on the available GDP data (usually from Germany, France, Italy, the Netherlands, and Greece) and relevant monthly indicators for other countries (whose national GDP data are generally not available at the time of the flash estimate). The flash estimate focuses on quarterly growth rates and does not give any details of expenditure, output, or income components. The first full estimate of areawide GDP is published when most of the national data are available. This report includes details on the expenditure and output components of GDP. Only with the third estimate of GDP are the income components available. At the national level, the procedure for the estimate of GDP varies, using different mixtures of output based and expenditure based data. Also for the major national release a flash estimate is followed by more detailed reports.

Country weights in GDP

% of 1995 constant price euros, 2002

Belgium	3.9
Germany	33.2
Greece	1.8
Spain	8.9
France	22.2
Ireland	1.4
Italy	15.1
Luxembourg	0.3
Netherlands	6.2
Austria	3.3
Portugal	1.6
Finland	2.0

Sector weights in GDP

% of real value added, 2002

Agriculture, fishing, forestry	2.3
Industry (incl construction)	27.4
Services	70.6

Timing: The flash estimate is available 45-48 days after the end of the reference quarter. The first full estimate is available 60-70 days after the end of the reference quarter. The second and third full estimates are available around 100 and 120 days after the end of the reference quarter, respectively.

Seasonal/focus: The focus is on seasonally adjusted data. The national data are generally seasonally and working days adjusted, with the exception of Italian GDP, which is not working days adjusted.

Revisions: The flash estimate does not include any revisions to the prior data, but subsequent releases provide back revisions where appropriate.

Comments: The flash estimate from Eurostat comes out very quickly after the earliest national releases, which has shifted the focus a little away from the national reports. However, details such as the expenditure components still tend to come more quickly from the national reports. Note that the flash estimate tends to be a very good guide to the first release: the error tends to be extremely small.

Sector weights in IP

% volume, 2002

Intermediate goods	36.1
Capital goods	25.2
Durable consumer goods	4.4
Nondurable cons. goods	22.2
Energy	12.1

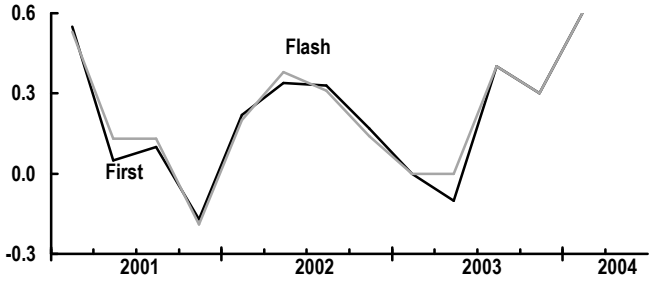
Industrial production

Source: Eurostat and national statistics offices.

Description: The monthly industrial production report for the Euro area is produced by Eurostat. It is not simply an aggregate of the national IP reports, as with GDP. Instead, Eurostat collects working-day-adjusted data from individual member states, which are then aggregated before being adjusted for seasonal effects. Because of this methodology, there can be differences between the data reported by Eurostat and a simple weighted average of the national IP reports, which have different seasonal adjustments. The

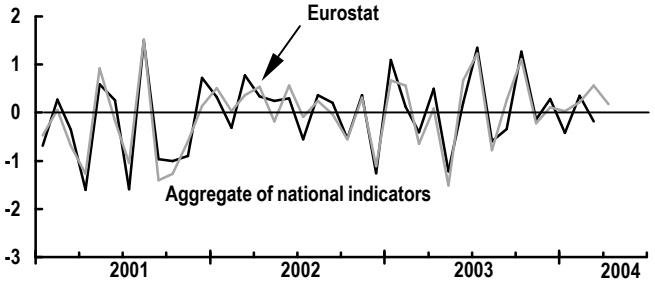
Euro area GDP: the flash and first estimates

percent change over 1 quarter



Euro area IP: the Eurostat measure and the national measures

% change over one month



JPMorgan Chase Bank, London
Silvia Pepino (44-20) 7325-4250
silvia.pepino@jpmorgan.com

Eurostat data measures net output at constant prices (value added at factor cost) for the industrial sector excluding construction. The sectors covered comprise mining and quarrying, manufacturing, and utilities. The data are also broken down into intermediate goods, capital goods, durable consumer goods, and nondurable consumer goods. Because the Eurostat data tend to come out relatively late, more than a month and a half after the reference month, and because they do not directly feed into the GDP calculations, there is still significant focus on the national IP releases, especially for Germany, France, Italy, and Spain. Indeed, for forecasting GDP, the appropriate methodology is to track the national IP data rather than the Eurostat measure. The German report is the most closely followed: not only is Germany the largest economy, but its IP data are the first reported for the reference month. In contrast with the statistics elsewhere, the headline IP number for Germany also includes construction output.

Timing: The Eurostat IP report is published towards the end of the second month after the reference month: thus, the March release would be published towards the end of May. The main national IP reports are published more quickly: the German report is usually available at the beginning of the second month following the reporting month.

Seasonal/focus: Focus is on the seasonally adjusted data.

Revisions: Revisions can be frequent and major, especially in Germany.

Comments: The national IP data are the most important monthly official activity indicators of the region's output performance as measured by GDP, given their availability, reliability and timeliness.

Industrial orders

Source: Eurostat and national statistics office

Description: An areawide aggregate of industrial new orders is produced by Eurostat since September 2003. However, the focus remains on the longer-standing German and Italian releases. A breakdown is provided by end-use category—intermediate, capital, consumer durable, and consumer nondurable goods—as well as by source—domestic or foreign. The German data tend to receive more attention as they are available in volume terms, while the Italian ones are published in value terms. In addition, the German data are significantly more timely.

Timing: Orders are published in the second subsequent month: in Germany, at the beginning of the month, about a week before the IP release for the same reference month; in Italy, around the middle of the month, after the release of IP data for the same period. The Eurostat aggregate is released at the end of the second month after the reference period.

Seasonal/focus: Both the German and Italian data are seasonally adjusted.

Revisions: Revisions can be frequent and major, especially in Germany.

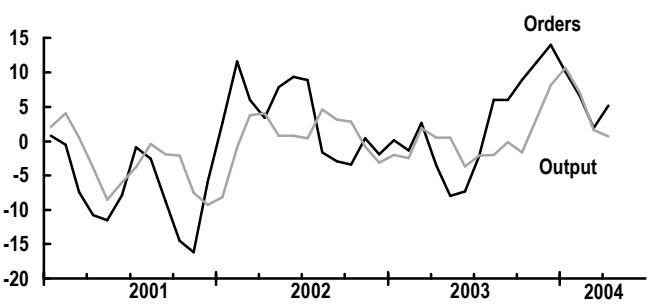
Comments: Usually a good indicator of manufacturing output performance.

Purchasing managers indices (PMI)

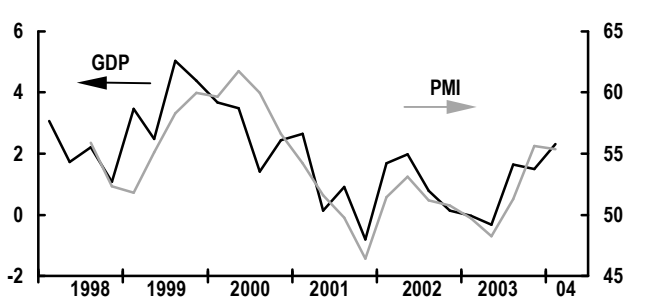
Source: Published exclusively by Reuters, the surveys are carried out by NTC, a private research group, in cooperation with national associations of purchasing managers (BME in Germany, CDAF in France, ADACI in Italy).

Description: Diffusion indices of the current economic situation in the manufacturing and services sectors in the Euro area, based on surveys carried out in a number of Euro area countries (Germany, France, Italy, Spain, Austria, Ireland, Greece). The indices are constructed so that values above 50 signify an improvement, and values under 50 a decline, in the economic situation compared to the previous month. The more the index value deviates from 50, the greater the improvement or decline in the current month. Managers of materials, purchasing, and logistics at industrial and service

German manufacturing output and orders



Euro area GDP and composite PMI



JPMorgan Chase Bank, London
Silvia Pepino (44-20) 7325-4250
silvia.pepino@jpmorgan.com

sector companies evaluate the index components compared to the previous month as better/higher, unchanged, or worse/lower. The manufacturing and services PMIs are aggregated into the composite PMI, which reflects activity in a large part of the Euro area private sector. The manufacturing PMI receives the most attention, as it is the first to be published, has the most history, and is normally a good proxy for developments in the economy as a whole. The service sector PMI helps to complete the picture. For the manufacturing PMI, the components that feed into the headline index are (with their weights in brackets): incoming orders (0.30), production output (0.25), employment (0.20), suppliers' delivery times (0.15), and stocks of items purchased (0.10). The sign of the delivery time index is inverted. The headline of the services PMI is an output index, rather than an aggregation of subcomponents. However, a breakdown similar to that in manufacturing is available. Finally, both surveys have separate indices for input and output prices.

Timing: The data are collected around mid-month. The manufacturing PMI is published on the first working day of the following month; the services and composite PMIs are published on the third working day of the following month.

Seasonals: The series are seasonally adjusted by the X-11 Arima method.

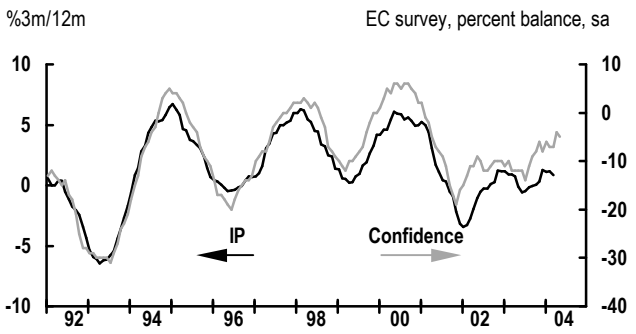
Revisions: Minor revisions to the previous month's indices are common.

Comments: Despite its short history, the purchasing managers survey has proved one of the most timely and reliable monthly indicators of Euro area growth momentum.

Business confidence surveys

Source: The national data are collected (and in most cases also published separately) by the institutes responsible for the national surveys: IFO in Germany, INSEE in France, ISAE in Italy, MINER in Spain, CBS in the Netherlands, BNB in Belgium. The raw national data are then sent to the European Commission, which aggregates the data, adjusts the series for seasonal factors, then publishes the results as the harmonized EC survey.

Euro area industrial production and industrial confidence



Description: the EC business confidence survey is published for manufacturing, services, construction, and retail trade (The last is discussed with the consumer confidence indicator under "Demand and Labor Markets"). The methodology used is that of diffusion indices; i.e., based on the difference between the percentage of respondents giving positive and negative replies to qualitative questions. The results are published separately for all 25 EU member states, plus GDP-weighted aggregates for the EU-25 and EU-12 (Euro area).

The industrial confidence indicator receives most attention. 24,000 firms are surveyed for the Euro area. The headline index is constructed as the arithmetic mean of answers (seasonally adjusted percent balances) to questions on: production expectations, assessment of order books, and assessment of stocks of finished products (the latter with an inverted sign). The manufacturing sector provides additional results on: production expectations, order books, export order books, stocks of finished products, selling price expectations, employment expectations and the production trend observed in recent months. In addition, every quarter, the manufacturing industry survey also reports on developments in capacity utilization, capacity constraints, estimated number of months' production assured by orders on hand, new orders, export volume expectations, and competitive position domestically, in the EU and outside the EU.

While the EC survey is important in bringing together the results for all countries under one header, the national versions of the surveys (IFO survey, INSEE, ISAE, BNB,...) still tend to receive more attention. This is mostly because they provide the same information one or two weeks earlier. Among the national releases, particularly important are the German IFO and the Belgian BNB surveys.

The **IFO survey** is normally considered a key coincident and leading indicator of the German and, reflecting development in its largest economy, the Euro area. It covers more than 7,000 enterprises in Germany (West and East) in manufacturing, construction, wholesaling, retailing. The headline "IFO Business Climate Index" is an aggregate of the sub-indices of current conditions (good/satisfactory/poor) and business expectations (better/same/worse). A sector breakdown of these indices is provided with the initial release. With some delay, more detail becomes available, with subindices along the lines of those mentioned above for the EC survey.

JPMorgan Chase Bank, London
Silvia Pepino (44-20) 7325-4250
silvia.pepino@jpmorgan.com

The importance of the **BNB survey** for Euro area datawatcher is unusually disproportionate to the small size of its country of reference. Indeed, the particular structure of the Belgian economy (an important supplier of intermediate goods to core Euro area countries) makes this survey a fairly reliable indicator of turning points. As the IFO survey (and in contrast with the France INSEE and Italian ISAE surveys), the headline **BNB survey** covers not only manufacturing, but also retail and construction. The methodology is very similar to that described for the EC survey.

Finally, the **ZEW survey** in Germany tends to receive more market attention than its content alone would warrant, because it is published a week before the IFO. As a matter of fact, the ZEW survey gathers opinions of analysts, rather than businessmen, on the outlook for the German and Euro area economies.

Timing: The national surveys are generally carried out in the first two to three weeks of the month. The surveys are usually published in the second half of the reference month, usually starting with the BNB and the IFO. The areawide aggregate is published after most of the national data are out, usually at the end of the reference month.

Seasonals: For the EC survey, the European Commission uses a method called Dainties to adjust the series for seasonal factors, which is different from the X11 Arima method used in most countries. This largely explains why the results published by the national sources often differ from the country outcomes published by the European Commission.

Revisions: Revisions are rare and small.

Comments: The EC and national business confidence surveys are important indicators for tracking activity in the Euro area. However, they are normally less precise than the PMIs in gauging quarterly growth momentum, as they are more prone to distortions from shifts in sentiment rather than actual activity.

Unemployment

Source: Eurostat and national statistics offices

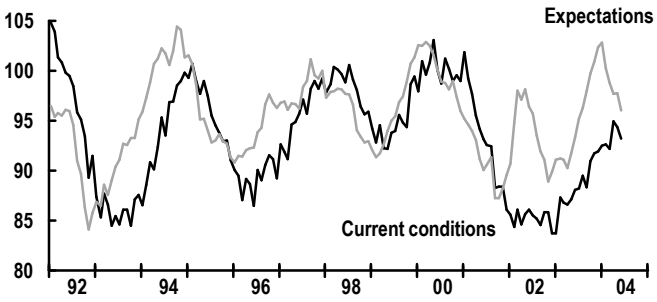
Description: Eurostat produces a harmonized measure of unemployment and of unemployment as a share of the labor force (unemployment rate). The data are published on a country by country basis and as aggregates for the EU-15 and EU-12 (Euro area). The monthly unemployment rates are estimated based on data from the annual Community Labor Force Survey (LFS), held in the spring according to International Labor Organization (ILO) recommendations. These results are interpolated or extrapolated to monthly data using figures from national quarterly surveys and national monthly series on registered unemployment. Estimated rates thus differ from national unemployment rates owing to differences in method and definitions of unemployment. According to the ILO, unemployed persons are: persons aged 15 years and over, who are without work, who are available to start work within the next two weeks, and who have actively sought employment at some time during the previous four weeks. Meanwhile, the national statistics offices continue to publish their own monthly or quarterly reports on unemployment and unemployment. The most watched is the German monthly unemployment report, followed by the French one. The employment data receive less attention because of the longer time lags involved.

Timing: Harmonized monthly unemployment data are released around the 10th of the second month following the end of the reporting month. Germany, France, Spain and the Netherlands release their unemployment data ahead of the Eurostat statistics. Note that Italian unemployment data are only reported quarterly. The Dutch unemployment statistics are published as three-month centered moving averages, which explains why the reporting month for this release lags that in other countries. For example, the September reading contains information on August, September, and October.

Seasonals: The data are adjusted for seasonal factors.

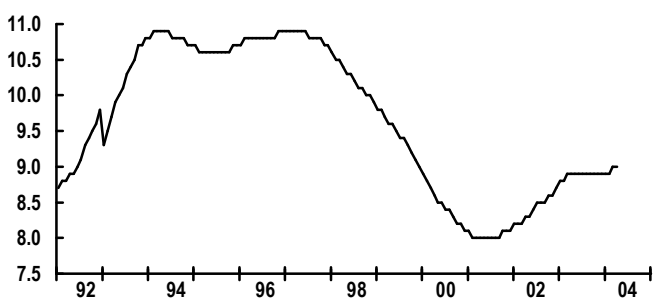
IFO survey: current conditions and expectations

2000=100



Euro area unemployment rate, sa

percent



JPMorgan Chase Bank, London
Silvia Pepino (44-20) 7325-4250
silvia.pepino@jpmorgan.com

Revisions: Revisions to monthly data are rare and modest. But the process of convergence to the ILO definition of labor force and unemployment can lead to significant revisions to the series.

Comments: Timely information continues to be provided by the national releases on registered unemployment. But, the definitions, samples, frequencies, and registration methods of national unemployment rates differ substantially across countries. The harmonized unemployment rates from Eurostat are the best means to assess how the labor market is developing in the region as a whole. However, the ongoing process of convergence to the ILO definition of labor force and unemployment (different countries are at different stages in this process of convergence) can lead to technical distortions in the data and diminish their accuracy in tracking actual labor market trends.

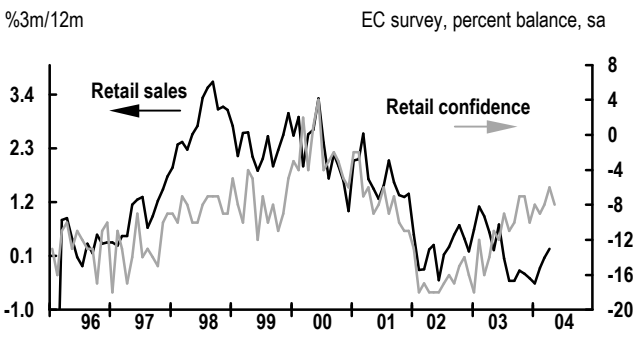
Retail sales

Source: Eurostat and national statistics offices.

Description: The monthly retail sales report for the Euro area is produced by Eurostat. The Euro area retail trade index is a volume index. It does not include car sales. It is not used for the computation of Euro area GDP (see GDP section above). The major Euro area countries release monthly information on retail sales, although only the German and French data are really useful to track consumption developments in the region. Italian retail sales are in value terms and not even used by ISTAT to produce the GDP estimate; Spanish retail sales are extremely volatile. In order to track private consumption in GDP and for reasons of timeliness German retail sales and French consumption of manufactured products are the focus. Both provide figures including and excluding autos.

Timing: The Eurostat retail sales report is published around the beginning of the second month after the reference month: thus, the March release would be published around the beginning of May. The main national IP reports are published more quickly: the French report on consumption of manufactured goods is usually available in the second half of the following month and German retail sales about a week later.

Euro area retail sales and retail confidence



Seasonal/focus: The focus is on the seasonally adjusted data. In Germany, the Bundesbank's seasonal adjustment is to be preferred to the Statistics office one, although the latter is usually published a few hours before and is often the focus of the German press.

Revisions: Revisions can be frequent and major, especially in Germany.

Comments: Retail sales are pretty much the only official monthly indicator of domestic demand in the Euro area.

New car registrations

Source: European car manufacturers' association (ACEA), and the national car manufacturers' associations.

Description: Registration of new cars. The monthly data are in units of cars registered, which are simply added together to create the aggregate for the Euro area as a whole.

Timing: The monthly data are usually published around the middle of the following month.

Seasonals: The data are highly influenced by seasonal factors. JPMorgan creates a seasonally adjusted series using an X12 Arima method.

Revisions: There are no revisions.

Comments: Car registrations are one of the few timely statistics on private consumption that are available for the region as a whole. However, the data should be interpreted with caution. Tax changes and subsidy schemes can heavily distort the numbers, as can the timing of holidays.

Retail trade and consumer confidence surveys

Source: The national data are collected (and in most cases also published) by the institutes responsible for the national surveys: IFO for retail and GfK for consumer in Germany, INSEE in France, ISAE in Italy, CBS in the Netherlands, BNB in Belgium. The raw national data are then sent to the European Commission, which aggregates the data, adjusts the series for seasonal factors, then publishes the results as the harmonized EC survey.

JPMorgan Chase Bank, London
Silvia Pepino (44-20) 7325-4250
silvia.pepino@jpmorgan.com

Description: Every month, an areawide **EC consumer confidence indicator** is published. This is defined as the arithmetic mean of answers to five questions to households. The national surveys are produced according to similar guidelines. The harmonized survey asks households for: their assessment of their financial situation over the past 12 months; expectations about their financial situation in the next 12 months; their assessment of the general economic situation over the past 12 months; their assessment of the economic outlook in the coming 12 months; and their inclination to make major purchases of durable consumer goods. In addition, the survey reports households' answers on: their assessment of prices over the past 12 months; their expectations for price developments in the coming 12 months; their expectations regarding unemployment; their buying intentions at present and for the next 12 months; their saving intentions at present and for the next 12 months. Also, every quarter, the consumer confidence survey reports on households' intentions to buy a car, on their intentions to purchase or build a home, and on their intentions to spend money on home improvements.

Also, every month, a **EC retail confidence** indicator is published. This is defined as the arithmetic mean of answers (i.e., seasonally adjusted balances) to questions on: the present business situation, the future business situation, and the assessment of stocks of finished products (the last with inverted sign). Moreover, the retail trade survey also reports on employment expectations, orders placed with suppliers in the next three months; and the outlook for business in the next six months.

Timing: The timing is the same for the (harmonized) business and consumer surveys. In Germany, Italy, the Netherlands, and often France, the national consumer confidence readings are published ahead of the EC release.

Seasonals: For the EC survey, the European Commission uses a method called Dainties to adjust the series for seasonal factors, which is different from the X11 Arima method used in most countries. This largely explains why the results published by the national sources often differ from the country outcomes published by the European Commission.

Revisions: Revisions are rare and small.

Comments : The consumer and retail confidence surveys is a timely and reasonably reliable indicators of private consumption trends in the Euro area. There is a fairly close relationship between the consumer confidence indicator and year on year private consumption growth in the region.

Foreign trade

Source: Eurostat, compiled from data provided by the national statistics offices.

Description: Monthly data on nominal exports, imports and the trade balance of merchandise goods, plus the trade balance, in billions of euros. The data are broken down into extra-Euro area and intra-Euro area trade, as well as extra-EU and intra-EU trade. In addition to the country by country details, aggregates are given for the EU-25 and the Euro area. The national statistics offices continue to publish their data ahead of the areawide release. Interpretation of the national releases is in some cases complicated by the fact that the split into Euro area and non-Euro area trade is published with a delay, while the initial releases contain an intra-EU/extra-EU split.

Composition of exports

% of export values, 2002

Machinery & transp equip	45.8
Chemicals	14.8
Raw materials	1.8
Energy	2.1
Food, drink and tobacco	6.0
Other manufactures	26.4
Other	3.1

Timing: The areawide trade report is published about two months following the end of the reporting month. The national reports are published in the two weeks before that.

Seasonals: All aggregates are seasonally adjusted

Revisions : Revisions are frequent and can be substantial.

Comments : Historical data are available from 1988 on.

Balance of payments

Source: European Central Bank.

Description: A monthly overview of the key items of the balance of payments for the Euro area, presented in euro terms. It is obtained by aggregating cross-border transactions of Euro area residents *vis-à-vis* non Euro area residents as reported by the 12 member countries following the definitions of the IMF balance of payments manuals.

Timing: Published at the end of the second month following the reporting month.

Seasonals: The data are not adjusted for seasonal factors. A quarterly report provides more detailed information.

Revisions : Revisions are common and can be sizeable.

Comments: In principle, the balance of payment aggregates could be compiled by adding up the net balance of payments of individual countries. This approach would require

JPMorgan Chase Bank, London
Silvia Pepino (44-20) 7325-4250
silvia.pepino@jpmorgan.com

intra-Euro area transactions to be netted out. In practice, however, bilateral trade data are not consistent across countries, which results in significant discrepancies at the Euro area level. And country contributions to the regionwide balance are not known as national balances include intra-Euro area flows. As a result of the approach chosen by the ECB, the net changes in assets and liabilities for the main items of the financial accounts can be reported. This facilitates the assessment of flows of funds that affect monetary and foreign exchange conditions of the Euro area.

Harmonized index of consumer prices (HICP)

Source: Eurostat, using data provided by the national statistics offices.

Description: A weighted average of the harmonized indices of consumer prices (HICP) of the 12 countries in EMU. The weights are calculated according to each country's share of private final domestic consumption expenditure in the EMU total. The index is computed as an annual chain index, allowing country weights to change each year. The outcome is published for the Euro area as a whole (MUICP), as well as for each country individually (HICP). The index reference period is set at 1996=100. All HICPs, and hence the MUICP, are divided into 12 subindices. The weights assigned to the 12 subindices differ across countries according to the spending pattern of households.

Breakdown of Euro area HICP

%, 2003

Headline	100
Unprocessed food	7.1
Energy	7.9
Core	85.1
Processed food	11.6
Core goods	31.6
Services	41.9

In addition to the harmonized index, the national statistics offices publish national consumer price indices (CPI). Preliminary estimates of the national CPIs are often available earlier than the corresponding HICPs, so they still receive a lot of attention. The key difference between the HICPs and the national CPIs is that some major items have been excluded from the HICP basket because no EU-wide agreement could be reached on how to measure them. These items include owner-occupied housing costs, and aspects of education and health care spending. These items will be incorporated gradually.

Country weights in HICP

%, 2003

Belgium	3.3
Germany	29.9
Greece	2.6
Spain	10.9
France	20.5
Ireland	1.3
Italy	19.2
Luxembourg	0.3
Netherlands	5.4
Austria	3.2
Portugal	2.1
Finland	1.6

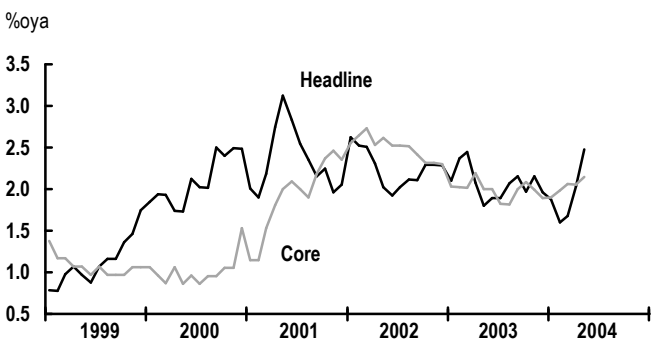
The most timely releases of consumer prices in the Euro area are for six German States (based on which a preliminary CPI estimate is produced for Germany as a whole) and twenty Italian cities. Shortly after these are released, Eurostat publishes a flash estimate of headline areawide HICP inflation in the second half of the reporting month. This is based on data from Germany and Italy, and any other national data available (usually from Belgium and possibly Spain) plus early information on energy prices. The full estimate includes data for all member states and covers all the details.

Timing: The German States and Italian cities report preliminary CPI data around the 20-25th of the reporting month. The Eurostat flash estimate for the Euro area HICP is published about a week later. The French CPI and HICP is published at the beginning of the following month. The full areawide release is published in the middle of the following month.

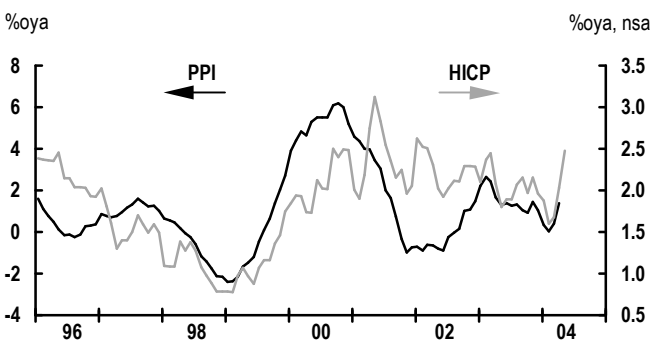
Seasonals: The data are not adjusted for seasonal factors.

Revisions : While there can be differences between the flash estimate and the full release of the Euro area HICP (usually no more than a tenth of a percent), revisions to the full release tend to be occasional and minor.

Euro area HICP: headline and core



Producer prices and HICP



JPMorgan Chase Bank, London
Silvia Pepino (44-20) 7325-4250
silvia.pepino@jpmorgan.com

Comments : This is the single most important series for monitoring monetary policy in the Euro area, since the primary objective of the European Central Bank is expressed as keeping the year on year rate of HICP inflation below, but close to, 2% in the medium term. For policy purposes, the breakdown between core HICP (excluding unprocessed food and energy) and the volatile food and energy components is particularly important, as it allows analysts to distinguish underlying pressures from temporary shocks.

Index of industrial producer prices (PPI)

Source: Eurostat, using data provided by the national statistics offices.

Description: Monthly index of a weighted average of domestic output prices at the producer level. It is broken down into intermediate, energy, capital, durable consumer, and nondurable consumer goods. National figures are published first, followed by an areawide aggregate.

Timing: The national data start to be published towards the end of the following month and the Euro area aggregate is released at the beginning of the second following month.

Seasonals: The data are not adjusted for seasonal factors.

Revisions : Minor.

Comments : Producer price inflation is watched as an indicator of pipeline consumer price pressures.

Hourly labor costs

Source: Eurostat, using data provided by the national statistics offices.

Description: Quarterly indices of hourly labor costs in the Euro area. Three different indices are published for the whole economy: total hourly labor costs, and the component wages and nonwage series. In addition, there is an index of total hourly labor costs in industry. Total labor costs include employees' gross earnings plus indirect costs such as employers' social security contributions and taxes linked to employment. Total labor costs do not include costs for occupational training, or for canteens or recruitment, among others. Gross wages and earnings are those paid directly and regularly by the employer at the time of each wage payment; i.e., excluding bonus payments. They include the value of social contributions, income taxes, etc., payable by the employee, even if they are actually withheld by the employer and paid directly to the authorities. The definition of the whole economy includes all market economic activities except agriculture, fisheries, forestry, education, health, entertainment, information, and personal services. Hourly labor costs are obtained by dividing the total of these costs, for all employees, by total hours worked by these employees. However, in some countries hours paid or number of employees are used as a measure of labor volume, instead of hours worked.

Timing: Published three months after the end of the quarter.

Seasonals: The data are not adjusted for seasonal factors. The short history of the series implies that no meaningful seasonal adjustment can be calculated yet. The data are available from the first quarter of 1997 onwards.

Revisions: Revisions are common. The data are calculated three times per quarter and are never considered final.

Comments: The figures for the Euro area aggregates are calculated when 60% of the national information for the series is available. Missing or delayed data are estimated in order to calculate the aggregates. While there is an effort at harmonization, there remain important differences in coverage and calculation across countries. This generates significant distortions to the aggregate figure, reducing its usefulness. Miscellaneous indicators of wages and labor costs are available at the national level, such as the Italian monthly contractual wage data.

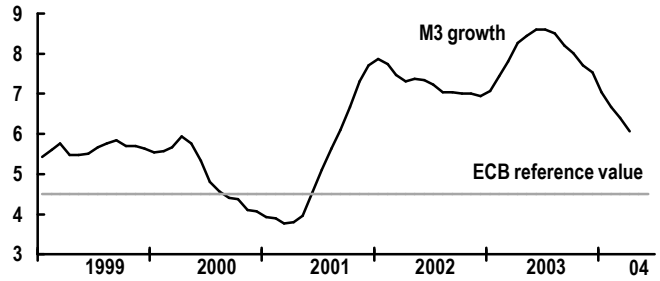
M3 money aggregate

Source: European Central Bank.

Description: The aggregate includes money holdings of all Euro area residents that are not part of the Monetary Financial Institutions sector (MFI)—which is defined as the money-issuing sector and consists of the national central banks, the ECB, credit institutions, and other financial institutions whose liabilities may be of a monetary nature. It is measured on a monthly basis in billions of euros. M3 includes currency in circulation plus Euro area residents' holdings of the following assets: overnight deposits; deposits with an agreed maturity of up to two years; deposits re-

Euro area M3 money supply growth

%oya, 3mma



JPMorgan Chase Bank, London
Silvia Pepino (44-20) 7325-4250
silvia.pepino@jpmorgan.com

deemable at notice of up to three months; repurchase agreements; money market fund shares/units; and money market paper and debt securities up to two years' maturity. The figures are compiled from a consolidated balance sheet of the MFI sector.

The focus is on the percentage change over a year ago and the three-month moving average of that percentage change. Note that the headline annual percentage change that is reported cannot be derived from the M3 levels published by the ECB. Instead, the growth rates on a year earlier are derived from the monthly *flow* data. These monthly flows of M3 are adjusted for reclassifications, exchange rate variations, other revaluations, and other changes that do not arise from transactions.

Timing: Released at the end of the following month.

Seasonals: Seasonally adjusted monthly data are available. However, the short history available and potential changes in the pattern from the launch of EMU cautions against putting too much emphasis on the seasonally adjusted data.

Revisions: Revisions can be quite considerable. This reflects the fact that some individual country reports feeding into the Euro area aggregate are still incomplete at the time of the first release and hence need to be estimated.

Comments: Monetary analysis has been one of the two pillars of the ECB's monetary policy strategy. Thus, the ECB has determined a term reference value for money growth (defined as a centered three-month moving average of the annual percentage change) of 4.5%. This should ensure that the monetary aggregate grows at a pace that is consistent with stable inflation. Inflation, real GDP growth, and velocity of circulation changes are taken into account in determining this reference value. The ECB currently assumes HICP inflation of less than 2%, an annual GDP growth trend of 2 to 2.5%, and a declining velocity trend of 0.5 to 1% points per year.

However, the M3 measure is affected by money market developments, which reduces its usefulness as an indicator of medium term inflation pressure. This loss of importance of M3 as a guide to policy decisions was sanctioned in a recent ECB strategy review, where the monetary analysis was "downgraded" from a "first pillar" to a " means of cross-checking, from a longer-term perspective, the shorter term indications from economic analysis." Reflecting this perspective, more weight is being put on credit growth (particularly loans to the private sector), the counterpart of M3 that most closely reflects cyclical developments.

JPMorgan Chase Bank, London
Silvia Pepino (44-20) 7325-4250
silvia.pepino@jpmorgan.com

Main Euro area data sources

Euro area

ECB: Publishes statistics on Euro area M3, balance of payments, and the monthly bulletin and annual reports. Also provides schedule for the meetings of the ECB, monetary policy decisions and press conferences.
http://www.ecb.int/

Eurostat: Publishes most Euro area statistics. Also provides the release calendar.
http://europa.eu.int/comm/eurostat/

European Commission: Publishes the EC survey of business and consumer confidence. Produces quarterly forecasts of the Euro area economy and reports on the business cycle. English versions of the Stability and Growth Programs of the various countries can be found here.
http://europa.eu.int/comm/economy_finance/index_en.htm

ACEA: Publishes statistics on European car sales.
http://www.acea.be/

Germany

Bundesbank: Publishes all seasonally adjusted economic statistics, apart from the Ifo survey, car sales, and VDMA orders. Also, provides banking and capital market statistics.
http://www.bundesbank.de

Federal Statistics Office: Publishes seasonally unadjusted statistics apart from unemployment, IP, and manufacturing orders. Some seasonally adjusted data are available, but they often differ from the Bundesbank's X-11 adjusted data, which are generally superior.

http://www.destatis.de

Ifo Economics Research Institute: Publishes IFO survey.
http://www.ifo.de

Labor Office: Source of labor market data and reports.
http://www.pub.arbeitsamt.de/hst/services/statistik/

Federal Finance Ministry: Useful website for information on budgetary developments in Germany and a monthly report. Published IP and manufacturing orders data.
http://www.bundesfinanzministerium.de

ZEW (Center for European Economic Research). Publishes the ZEW survey.
http://www.zew.de

Leading Six Research Institutes that publish Spring and Autumn forecasts (Ifo Institute is one of them):

Economics Research Institute in Halle (IWH):
http://www.iwh.uni-halle.de/

German Institute for Economic Research:
http://www/diw-berlin.de/

HWWA Research Institute:
http://www/hwwa.uni-hamburg.de/english/index-engl-overview.htm

Institute for World Economics in Kiel:
http://www.uni-kiel.de:8080/IfW/homeng.htm

Rhine-Wesphalia Institute for Economic Research:
http://www/rwi-essen.de/

France

Bank of France: Publishes statistics on French economy, monetary and financial behavior, financial markets and key events in France.
http://www.banque-france.fr/

National Institute of Statistics and Economics (INSEE): Publishes all seasonally adjusted statistics (monthly and quarterly indicators) and also monthly and quarterly surveys of industrial and construction sector confidence.
http://www.insee.fr/

Economics and Finance Ministry: Publishes the trade balance figures. Also provides a monthly report and budget details.
http://lekiosque.finances.gouv.fr

http://www.finances.gouv.fr/indicateurs/budget/

Labor Ministry: Source of unemployment and labor market data.
http://www.travail.gouv.fr/index.asp

National Assembly: Provides all discussions, projects and reports about LFI.
http://www.assemblee-nationale.fr

JPMorgan Chase Bank, London
Silvia Pepino (44-20) 7325-4250
silvia.pepino@jpmorgan.com

Italy

Bank of Italy: Publishes monetary, credit, financial and balance of payments data.
http://www.bancaditalia.it

National Statistics Institute (ISTAT): Publishes all economic statistics from the ISAE and Confidustria surveys, car registrations, balance of payments and money and credit aggregates
http://www.istat.it

Treasury Department: Publishes fiscal and economic reports, as well as official policy documents such as: monthly PSBR, quarterly debt bulletin, issuance programs, budget papers etc.
http://www.dgt.tesoro.it and
http://www.tesoro.it

Economic Analysis and Study Institution (ISAE): Publishes the monthly ISAE surveys on business and consumer confidence.
http://www.isae.it

Confindustria: The national association of Italian entrepreneurs' web site includes press reports, publications of their economic research unit, business cycle analysis and forecasts, and monthly surveys of industrial firms.
http://www.confindustria.it

ICE: National Institute for Foreign trade (or in Italian: Istituto per il Commercio con l'estero). The web site provides bulletins, data, and studies on foreign trade.
http://www.ice.it

Spain

Bank of Spain: Publishes quarterly and annual reports on the economy, as well as monetary, credit, financial and balance of payments data.
http://www.bde.es

Statistics Office (INE): Publishes most data on the Spanish economy, which are mostly nonseasonally adjusted.
http://www.ine.es

Labor office: Monthly data on registered unemployment.
http://www.inem.es

Ministry of Economics and Finance: Provides a weekly update of economic indicators summary data, a monthly report on the economy and government macroeconomic forecasts.
http://www2.mineco.es/mineco/
http://portal.minhac.es/Minhac/Home.htm

Ministry of Industry and Energy: Compiles a monthly survey of industrial and construction sector confidence.
http://www.mcyt.es/

Customs department: Provides merchandise trade data.
http://www.icex.es/

Institute of tourism studies: Provides data on inflows of tourists and reports on tourism trends.
http://www.iet.tourspain.es

The Netherlands

Dutch National Bank (DNB): The web site of the central bank is useful for information on balance of payment statistics and Dutch money supply figures.
http://www.statistics.dnb.nl/indexuk.html

Statistics Office (CBS): Publishes all press releases.
http://www.cbs.nl/en/services/index.htm

CPB: Independent research institutes which provides publications with very extensive macroeconomic forecasts for the Netherlands (The "Macroeconomicshe Verkenningen" in September, and the "Centraal Economisch Plan" in March, which serve as input into the government's budgetary policy).
http://www.cpb.nl/eng/

Finance Ministry: Useful web site for information on budgetary developments in the Netherlands. Particularly useful are the monthly reports to the IMF, which include monthly updates of the Netherlands' fiscal deficit according to EMU definitions.
http://www.minfin.nl/uk/budget/home_bud.htm

Belgium

Belgian National Bank (BNB): Provides most statistics on Belgium, but with a lag. The web site includes the press releases on the BNB survey, yet without the data.
http://www.bnb.be/sg/E/homee.htm

J.P. Morgan Securities Asia Pte. Ltd., Tokyo
Ryo Hino (81-3) 5573-1169
ryo.hino@jpmorgan.com

Japan

The monthly data cycle

Same month	Following month	Second following month
Final third	**First third**	**First third**
Shoko Chukin survey	Manufacturing PMI	Leading indicators index
Tokyo consumer prices	Auto registrations	Employers' survey
	Money supply	Balance of payments
	Bank lending and deposits	
	Tokyo consumer sentiment	
	Middle third	**Middle third**
	Economy watchers survey	Machinery orders
	Corporate goods prices	Construction works
	Current account	
	Tokyo consumer sentiment	
	Tokyo department store sales	
	Final third	**Final third**
	Customs cleared trade	All-sector activity index
	Industrial production	
	Household survey	
	Survey of employment trends	
	Labor force survey	
	Retail sales	
	Housing starts	
	Construction orders	
	Corporate service prices	

The quarterly data cycle

	Following month	Second following month
	BoJ Tankan survey	GDP 1st preliminary estimates
	Nationwide consumer sentiment	MoF corporate survey
	ESRI corporate survey	METI indices of all industrial activity

The 10-day data cycle

Same month	Following month
10-day customs trade	20-day customs trade

The weekly data cycle

Tuesday	Thursday
	Securities investments at home and abroad

J.P. Morgan Securities Asia Pte. Ltd., Tokyo
Ryo Hino (81-3) 5573-1169
ryo.hino@jpmorgan.com

Gross domestic product

Source: Economic and Social Research Institute (ESRI)

Description: National accounts statistics initially appear in the form of quarterly expenditure-based GDP estimates, which the ESRI compiles from a wide variety of data, much of it collected by other ministries and agencies. The basic approach for calculating the preliminary estimates was altered in 2002 to incorporate data that measure both demand and supply. Previously, the estimates were based on demand data, and were criticized for their lack of quality and coherence with supply-side data. The preliminary expenditure-based estimates are released in nominal and real terms (the current base year is 1995) along with deflators. Quarterly labor income accounts are also published with the revisions, together with annual balance sheet data.

GDP composition in 2003

% of real total

Private consumption	55
Nonresidential investment	17
Residential investment	3
Government consumption	17
Public investment	5
Exports	12
Imports	19

Timing: A first preliminary report, or "Quick Estimate" (QE) as it is officially referred to, is released around the middle of the second month following the quarter's end. A second preliminary report is released in the following month, incorporating additional expenditure-side data on small firms' and financial institutions' investment, balance of payments revisions, and other data that were incomplete when the first estimates were released. The figures then enter the finalizing stage, and the definitive report is released on a fiscal year basis with a two-year lag, incorporating fiscal settlement data.

Seasonal/focus: The ESRI implements the Census X-12 method of seasonal adjustment. The (domestic) market focus is on quarter-on-quarter, seasonally adjusted (nonannualized) rates of growth. The official (government) focus is often on fiscal year data and over-year-ago changes.

Revisions: Revisions have become more frequent, not only to the current quarter, but also to the preceding quarters for which the data are still preliminary. The focus of the revisions in the second estimates is mainly on the capital spending figures because they incorporate demand-side data primarily drawn from the MoF corporate survey.

Comments: The 2002 modifications reduced the volatility of the series, and they better track the available supply-side data. However, this has not made forecasting the GDP figures easier: the range of forecasts in the lead-up to the release remains wide compared to that in (for example) the United States. The methodology is far more complex than before, there are more data inputs used (supply-side data are based on commodity flows containing 90 categories, most of which are not publicly available), and the ESRI runs quarterly projections for those data that are incomplete at the time of the GDP release. In terms of credibility, the biggest single problem remains private consumption, for which the primary input is the infamous household survey (see below). That survey's problems have been criticized for years, and much of the volatility in the GDP figures is inherited from it. But alternatives are scarce and this issue appears unlikely to be resolved soon.

Another more recent issue is the GDP deflator, which is showing a substantially greater magnitude of deflation in the economy than the other price indicators. This is resulting in a notable disparity between real and nominal growth. Two technical factors help to explain this. First, the GDP deflator is calculated using the Paasche method, which tends to produce a downward bias over time. In contrast, the other price indicators are calculated with the Laspeyres method, which produces an upward bias. Second, price indicators vary in the extent to which quality changes are reflected via the hedonic regression method. The GDP deflator and the CGPI incorporates this extensively, while other indicators, such as the CPI are relatively limited.

Indices of tertiary industry activity

Source: Ministry of Economy, Trade and Industry (METI)

Description: This monthly release is a fairly comprehensive report on corporate sector activity from a supply-side perspective. While industrial production (below) attracts the most attention because manufacturing activity tends to drive the business cycle, the tertiary sector accounts for 60% of total output. Primary focus is on the all-sector index, which also includes construction and public-sector activity. This index is re-

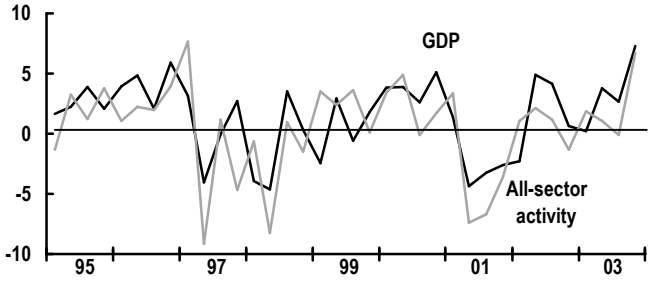
All-sector index composition

% of total

Agriculture	1.8
Construction	8.1
Industrial production	22.4
Tertiary sector	59.5
Public sector	8.2

Real economic growth

%q/q, saar



J.P. Morgan Securities Asia Pte. Ltd., Tokyo
Ryo Hino (81-3) 5573-1169
ryo.hino@jpmorgan.com

garded as a monthly supply-side proxy for real GDP, although opposition from the ESRI prevents METI from advertising the index as such. Nevertheless, the METI index is a more reliable measure than the preliminary GDP figures because it is less volatile, and undergoes fewer revisions.

Timing: The tertiary report is released in the latter third of the month with a two-month lag. So, compared to other high-frequency indicators, it is relatively untimely.

Seasonal/focus: Figures are seasonally adjusted (X-12-ARIMA), and the focus is on monthly changes. Market focus is relatively low, since the quarterly figures are released after the GDP 1st preliminary estimates.

Revisions: The first report should be regarded as preliminary, as revisions are made sometimes in subsequent months. The figures are finalized when the seasonal adjustments are reapplied once a year.

Comments: The Tertiary sector activity report is far from perfect: accurate measurement of services output is notoriously difficult, as in many cases (e.g., financial services) it can only be done using imperfect surrogate data. And while the data are supposed to measure volumes, there are some components for which volume figures are not available (such as retail sales) and so the METI must resort to applying a deflator to nominal figures to derive real values.

Industrial production

Source: Ministry of Economy, Trade and Industry (METI)

Description: A monthly survey that covers 60% of total industrial output (99.8% of which is manufacturing). A direct component of the all-sector activity index, industrial production has traditionally garnered the most market attention among the high-frequency data. Timeliness is one reason, but history shows that manufacturing activity, which is closely correlated with the global cycle, largely dictates the domestic business cycle. Furthermore, the industrial production report contains a forward-looking survey of firms' projections for the following two months. These projections cannot be taken at face value; indeed, they consistently overestimate actual output. But as a forecasting guide, they remain one of the more reliable indicators. The report also contains a breakdown of shipments, inventories, and inventory ratios (a key leading indicator of the production cycle used as a component of the ESRI's index of leading indicators); and (with a lag) operating ratios. The shipment figures are useful as the most readily available proxy for the supply components that are now used in compiling GDP.

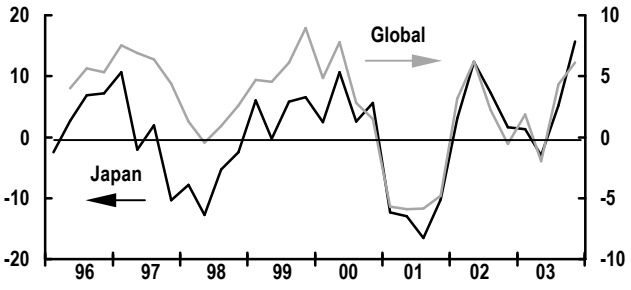
IP composition

% of total

Iron and steel	9.8
Nonferrous metals	2.2
Metal products	5.8
General machinery	11.2
Electrical machinery	5.0
IT-related equipment	8.2
Electronic parts and devices	14.7
Transport equipment	14.5
Chemicals	9.9
Paper and pulp	5.4
Others	13.3

Industrial production

%q/q, saar



Timing: Released near the end of each month with a one-month lag.

Seasonal/focus: The industrial production figures are seasonally adjusted with the ARIMA X-12 method. The main focus is on the month-on-month changes, as well as the METI survey projections for the next two months.

Revisions: A final report is released around the middle of the following month. Revisions are usually minor and mostly a result of late incoming components (drugs, food and beverages), which are not administered by METI. But like the all-sector activity index, this series undergoes an annual revision to the seasonal adjustments. This report also includes the operating ratio (capacity utilization) and production capacity.

Comments: Since Japanese growth is—even more than most industrialized economies'—closely geared to exports and global demand, manufacturing activity remains the most important coincident indicator of the business cycle, even as the share of services grows. The ESRI's official measures of the business cycle (business indices, see below) remain heavily weighted towards manufacturing.

Electricity demand

Source: Electric Power Association

Description: Monthly nationwide electric power sales (in kWh) are collected from the nine major power companies, and broken down into industrial, commercial, and residential usage. Industrial usage is subdivided into seven major industries: machinery, iron and steel, nonferrous metals, ceramics, chemicals, paper and pulp, and textiles.

J.P. Morgan Securities Asia Pte. Ltd., Tokyo
Ryo Hino (81-3) 5573-1169
ryo.hino@jpmorgan.com

Timing: Third week of the following month.

Seasonal/focus: No seasonal adjustment. This is not watched by the market, though the industrial usage component is a useful forecasting tool for industrial production, owing to its timeliness.

Revisions: Minor.

Comments: The correlation between electricity demand and industrial production is not as tight as it once was. Electricity figures are prone to distortions related to industry deregulation and other microeconomic changes. Nevertheless, the relationship is still good enough to help forecast the direction of changes in industrial output, if not the magnitude. At the very least, it provides a check on the METI survey projections.

Leading business indices

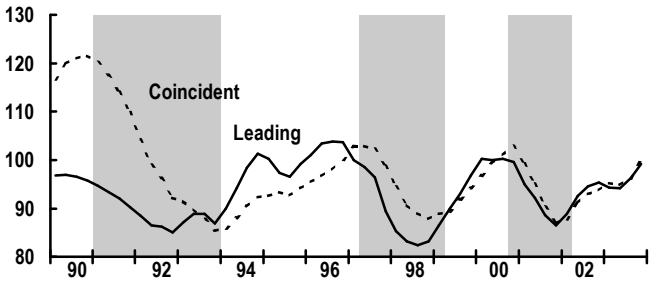
Source: Economic and Social Research Institute (ESRI)

Description: Monthly indices of leading, coincident, and lagging indicators, which track the business cycle, are compiled from a broad selection of monthly and quarterly data releases into either diffusion indices (DIs) or composite indices (CIs). The DIs measure the percent of indicators going into each index that show a rise compared with their levels three months ago, and thus show how widely spread is any improvement or deterioration. The CIs are an expression of the overall level of output, calculated as a weighted geometric average of percentage changes (from the previous month) in each component, and provide an aggregate measure of the magnitude of changes.

Timing: First third of the month with a two-month lag.

Seasonal/focus: The DIs are not seasonally adjusted, though all the component indicators are. The CIs are seasonally adjusted. Market attention is minimal, as most components are known beforehand, and focuses on whether the leading and coincident DIs are above or below 50.

ESRI business indices
composite index, 1995=100, sa



Revisions: Substantial, as preliminary readings are based on 9 or 10 components out of a total of 12. Also, incorporated figures are themselves preliminary and subject to revisions by the source organizations. Components not included in the preliminary report are either relatively untimely monthly data (such as machinery orders or manufacturing operating ratio) or quarterly figures.

Comments: The leading index is widely thought to point to activity 6-9 months ahead, and as a rule of thumb turning points in the cycle are heralded only when the leading DI rises above (or falls below) the 50% mark for three consecutive months. That said, the fact that the index often remains incomplete, and subject to revision, for several months after the preliminary figures, together with its already relatively late release, means that other data will often signal any change before it can be formally confirmed by the "leading" index. The DIs are used by the ESRI retrospectively to officially date the cycle. The CIs, which display much less noise, often provide a clearer short-term reading. The leading CI is most comparable to the leading economic index used in the United States.

Small business survey

Source: Shoko Chukin Bank

Description: This monthly survey of 800 firms (which will eventually shift to 1,000 firms) covers business conditions, sales, input and output prices, financial conditions, production capacity, and excess inventories and employment, broken down by type of industry. The qualitative survey results are presented in the form of diffusion indices (generally the percentage balance of firms that respond with "improving" minus those saying "deteriorating," with 50 being neutral). Projections for the following month are also compiled, though for the main sentiment index, they appear to display a slight upward bias.

Timing: The survey is conducted in the middle of the month and released around the end of the same month or the start of following month, which makes it one of the most timely indicators available.

Seasonal/focus: Seasonally adjusted. The primary focus is on the headline sentiment index, though the report generally does not attract much market or media attention.

Revisions: None.

Comments: Aside from its timeliness and low volatility, the real value of the sentiment index comes from the fact that it is a leading indicator of the cycle, and has a decent correlation with the ESRI's leading composite index. The senti-

J.P. Morgan Securities Asia Pte. Ltd., Tokyo
Ryo Hino (81-3) 5573-1169
ryo.hino@jpmorgan.com

ment index has also historically been a good leading indicator of the Bank of Japan's Tankan business indices.

Economy watchers survey

Source: Cabinet Office (economic assessment and policy analysis division)

Description: Initially dubbed as a "man-on-the-street" poll, this monthly survey aims to measure business conditions at the working level in eleven regions across the country. It samples 2,050 business persons and representatives in various fields from the 25th to the end of the month. A diffusion index (DI) computation method is used. For each question, respondents are given five answers to choose from, ranging from "better" (which has a weighting of 1.0) to "worse" (weighting is zero). There are two main indices, for current conditions and the outlook 2-3 months ahead. Each has three component indicators related to households, business, and employment with more detailed breakdowns by sector. The household index does not directly poll consumers, but instead covers sectors that are closely tied to consumer demand (such as retailers). Respondents are asked to explain their answers, and the responses are synopsized to provide useful anecdotal evidence.

Timing: Around the second week of the following month.

Seasonal/focus: DIs are not seasonally adjusted owing to a lack of historical data (the survey started in 2000). Market focus remains minimal.

Revisions: None.

Comments: This survey is comparable to the PMI (see below), save for the lack of seasonal adjustments. The lack of history is a constraint on analyzing the data. So far, the current conditions index generally moves in line with the Shoko Chukin small firm sentiment index, while the outlook index has not shown itself to be a leading indicator.

Purchasing managers index (PMI)

Source: Reuters/Nomura Group/Japan Materials Management Association

Description: This survey, started in 2003, is most comparable with the manufacturing PMIs released in other countries. The survey samples 300 respondents each month, where the sector coverage is equivalent to their contributions to GDP. As with the other PMIs, the survey contains diffusion indices for output, new orders, employment, suppliers' delivery times, stock of items purchased, and others. The overall PMI is a weighted average of the areas mentioned above.

Timing: First business day of the following month.

Seasonal/focus: The indices are seasonally adjusted. Market focus is very low as the survey is still new, and Reuters' exclusive coverage prevents wider exposure.

Revisions: None.

Comments: With historical data only going back to October 2001, this survey suffers the same problems as the Economy watchers survey. Despite its short time series, the PMIs are seasonally adjusted, which also raises some questions. The survey is worth monitoring while it builds a reasonable history, but until then it will be overshadowed by the Shoko Chukin small firm survey (which itself has yet to gain much recognition in a market with relatively little focus on high-frequency data).

BoJ Tankan survey

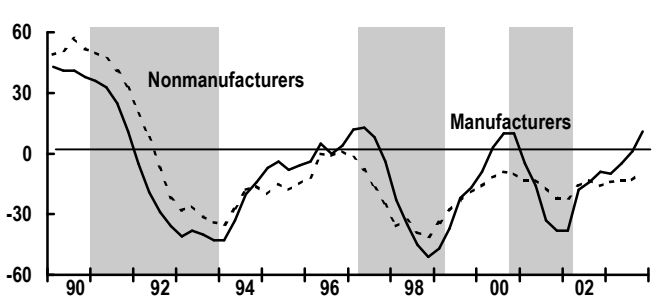
Source: Bank of Japan (BoJ)

Description: This is the most comprehensive quarterly business survey, covering almost 10,000 nonfinancial corporations nationwide and broken down by industry and size of firm. Qualitative information is presented in the form of diffusion indices (generally the percent saying "good" minus "bad," with 0 being neutral) relating to business conditions, demand and supply conditions, financial conditions, production capacity, inventories, employment, and ease of borrowing. Quantitative data—both historical results and projections—on business plans throughout the fiscal year focus on sales, profits, capital spending, overseas activity, new hiring, and foreign exchange rates.

Timing: The survey is conducted in mid-March, mid-June, mid-September, and early December, with most of the results of the first three surveys released at the start of the following month, and those for the December survey released in the middle of that month. However, full industry breakdowns from the survey are published the day after the initial results, and complete details in the publication of the full 300-page report a week later.

BoJ Tankan business conditions indices - large firms

DI, "good" - "bad"



J.P. Morgan Securities Asia Pte. Ltd., Tokyo
Ryo Hino (81-3) 5573-1169
ryo.hino@jpmorgan.com

Seasonal/focus: Mostly not seasonally adjusted. Market focus is extremely high and centers on large manufacturing firms' business conditions DI. Sales, profits, and capex forecasts, and also production capacity, inventory, and employment excesses draw attention as well.

Revisions: No frequent changes for the business conditions indices, but forecasts for the year ahead (such as capital spending and profits) undergo revisions with each quarterly release. But the survey sample is updated once every five years, which can lead to significant revisions in some categories. With the most recent sample update implemented this year, the BoJ has also changed the criteria by which firm size is categorized, and is now based on firm capitalization rather than the number of employees.

Comments: The Tankan is the most complete survey that covers both sentiment and business plans among various sectors and firm size. It is the centerpiece of the BoJ's own macroeconomic forecasting effort, and is widely used by private-sector economists to gauge the business outlook. The April survey draws particular attention because it contains the first business projections for the new fiscal year (April-March). Care is needed in interpreting business plan components, as there are established seasonal patterns for revision throughout the year. This means that initial (March) estimates, especially for small firms, should only be compared to the previous years' initial estimates; first-quarter revised figures to previous years' first-quarter revised figures; and so on. Projections start low, and are progressively revised up in the course of the year.

Labor force survey

Source: Ministry of Public Management, Home Affairs, Posts and Telecommunications

Description: A monthly survey of roughly 40,000 households nationwide, covering approximately 100,000 people aged 15 and over, extrapolated using national census data (the current survey is based on 1995 national population statistics). Unemployment (numbers and percent of work force) by age and sex, as well as employment by major sector, size of firm, gender, and length of working week are reported. The official definition of employment is broad: having worked at least one hour during the survey week (the last full week of the month). Total workers are also broken down into company employees, the self employed, and family workers, as well as regular and temporary (on fixed-term contract of less than one year) employees.

Timing: Last few days of the following month.

Seasonal/focus: Main items are seasonally adjusted (Census X-11). Market focus on the seasonally adjusted unemployment rate is moderately high.

Revisions: Minor, though the seasonal factors are reviewed every year in December.

Comments: The seasonally adjusted series have very little volatility, and with only annual revisions to the seasonal adjustments, can be regarded as a credible indicator of labor-market conditions. Total employment is the broadest measure of its kind and follows a highly cyclical pattern, lagging movements in the ESRI's nationwide consumer sentiment survey by about two quarters. The unemployment rate is used by the ESRI as a component of the lagging business index.

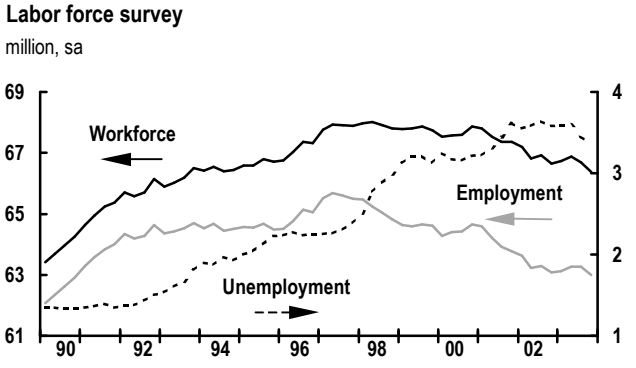
Survey of employment trends

Source: Ministry of Health, Labor and Welfare

Description: This survey compares the number of job offers and applications at around 600 public employment exchange offices—so-called "Hello Work" agencies—nationwide. Figures are broken down according to full- and part-time positions, as well as by industry and size of firm. New graduates are excluded to reduce volatility.

Timing: Last few days of the following month—always released in tandem with the labor force survey.

Labor force survey



Unemployment rate and job-offers-to-applicants ratio

J.P. Morgan Securities Asia Pte. Ltd., Tokyo
Ryo Hino (81-3) 5573-1169
ryo.hino@jpmorgan.com

Seasonal/focus: Major indices are seasonally adjusted (Census X-11), with the effective job-offers-to-applicants ratio (essentially a measure of the supply-demand balance in the labor market) being the headline number. Market attention is moderate.

Revisions: Minor.

Comments: The Hello Work offices represent a narrow base for tracking job applications and offers, but job openings data continue to correlate well with other series such as the monthly one published by the Association of Job Information of Japan. Moreover, the openings to applicants ratio shows considerably more cyclical sensitivity than the unemployment rate, and constitutes the single best indicator of employment trends in recent years. It is used by the ESRI as a component for the coincident business index; it is arguably the most reliable indicator out of the 12 components. The new job offers to new applicants ratio (excluding outstanding applications and offers) is sometimes a useful indicator of developments on the margin. New job offers are a component of the ESRI's leading business index, though its credibility as a leading indicator is debatable.

Monthly labor survey

Source: Ministry of Health, Labor and Welfare

Employment by sector

million, December 2003

Nonfarm	60.9
Construction	6.1
Manufacturing	11.8
IT sectors	1.5
Transport	3.3
Commerce	11.5
Finance and insurance	1.6
Real estate	0.7
Restaurants, hospitality	3.6
Medical and welfare	5.1
Education	2.9
Public sector	2.3
Other services	9.3

Description: A monthly poll of around 33,500 firms nationwide, the employment survey covers "regular" and "part-time" employees (the former broadly defined as those on contracts longer than one month or employed by the firm for more than 18 days in each of the previous two months). All information is split into firms with more than five employees and those with more than 30 employees: About half the sample firms have between 5 and 29 employees, and the other half have 30 or more. Raw data and indices are provided for employment and working hours (ordinary and overtime) by major sector. Wage data are available in nominal and real terms (deflated by the CPI excluding imputed rent), and are split into total cash earnings, "special" earnings (mainly bonuses, but also payments such as onetime marriage allowances and retroactively paid wages as a result of new employment agreements), overtime payments, and regular (base) wages. The latter are calculated as the residual difference between the total and other components.

Timing: The beginning of the second following month.

Seasonal/focus: Seasonally adjusted (X-12-ARIMA) indices are provided for hours worked, overtime, and employment data. Market attention is minimal.

Revisions: A final report is released in the middle of the month; revisions can be relatively large.

Comments: This is the broadest measure of wage income and employment. The broad survey sample and the top-down approach yield far more consistent results than the household survey, even considering that the latter measures more than just wage income. The monthly labor survey measure has a reasonably good correlation with the ESRI's nationwide consumer sentiment survey, as well as employee compensation in the national accounts. There is considerable volatility in total cash earnings, though much of that is seasonal, as summer bonuses are paid in June and July, while winter bonuses are paid in November and December. During these months, the special earnings component can account for about half of the average paycheck. Since bonus payments are said to lag the profit cycle by a about a year, the contracted wage portion (excluding special payments) is regarded as the best indicator of current wage trends.

New auto registrations

Source: Japan Automobile Dealers Association

Description: The monthly report tracks new registration tally for vehicles, split up into passenger cars (standard versus small, with a 2000cc engine being the dividing point), trucks (standard and small, with two tons being the dividing point), and buses. Mini vehicle (cars and trucks with engines smaller than 660cc) sales are reported separately, by the Japan Mini Vehicles Association, at the same time.

Timing: First business day of the following month.

Seasonal/focus: Data are not seasonally adjusted. The market focus, to the extent that there is any, is on the over-year-ago total change in the number (ex "light" vehicles).

Revisions: Minor.

Comments: Though auto purchases account for only about 4% of total private consumption, this is an important report, as registrations are the first monthly indicator of consumer spending and, theoretically, the most cyclically sensitive. Business-day effects are often significant, as registration offices are closed on weekends and holidays, and thus monthly changes tend to be erratic. About half of small truck registrations are, in fact, recreation vehicles (RVs) and "people carriers." As a result, JPMorgan creates its own

J.P. Morgan Securities Asia Pte. Ltd., Tokyo
Ryo Hino (81-3) 5573-1169
ryo.hino@jpmorgan.com

adjusted series of passenger car registrations, including a weighted value for light vehicles that makes allowance for their lower value.

Tokyo department store sales

Source: Japan Department Store Association

Description: Monthly sales values at approximately 30 store outlets in Tokyo.

Timing: Middle of the following month.

Seasonal/focus: Not seasonally adjusted. Market attention is low, but all major newswires report over-year-ago comparisons adjusted for changes in the number of outlets.

Revisions: None.

Comments: This is the first nonauto consumption indicator of the month, and is moderately useful in forecasting retail sales and household spending, with two caveats. First, changes in spending patterns, and a structural decline in sales to corporate clients, are causing department store sales to decline on a long-term trend basis; and second, month-to-month changes are volatile, partly owing to distortions caused by changes in the number of business days, weekends/holidays and seasonal variations.

Family income and expenditure survey

Source: Ministry of Public Management, Home Affairs, Posts and Telecommunications

Description: This monthly spending survey is the main demand-side input for calculating GDP private consumption. It contains detailed breakdown of income and expenditure, with many items reported in real as well as nominal terms, the real figures being deflated by the CPI excluding imputed rent. Based on a sample of 8,000 households nationwide, drawn from a pool of 26 million, the report is split into two sections, one covering "worker" households (those headed by a wage earner), and the other incorporating nonworking households in an "all household" measure. Worker households account for 61% of "all" households, and nonworking households 39%. Note that the official Japanese definition of "household" does not include single-member households. These are incorporated in a quarterly "general" household survey. But timeliness issues, and a lack of historical data, detract from its usefulness in forecasting GDP private consumption.

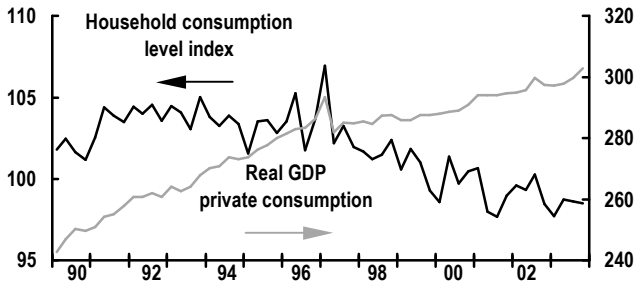
Overall household spending composition

% of nominal total 2003

Food	23.3
Housing	6.6
Utilities	6.9
Furniture & household goods	3.4
Clothing	4.8
Medical & insurance	3.8
Transport & communication	11.9
Education	4.2
Other	25.0

Household spending and GDP private consumption

2000=100, sa ¥ trillion, saar



Timing: A preliminary report covering worker-households (that is, households headed by a wage/salary earner) is released during the last week of the following month, with the "all-household" survey following a week later.

Seasonal/focus: Major components of expenditure are seasonally adjusted (Census X-11), but the public's main focus is still on over-year-ago changes in real spending. The series most relevant for tracking GDP private consumption is the Consumption Level Index (CLI), which adjusts for sample distortions in household size and calendar effects. Market attention is sporadic; the volatility of the data is well known, and new GDP calculation method has clouded the implications, yet a large swing either way can trigger market reaction sometimes.

Revisions: The seasonally adjusted series are revised once a year.

Comments: The report has numerous idiosyncracies, some of which are reflected in considerable month-to-month volatility. Large swings in outlays on big-ticket purchases such as autos appear to stem as much from the rotating nature of the sample—one-sixth of the survey's sample is changed each month—as from its narrowness. Spending is also widely reckoned to be significantly underestimated: first because the monthly report excludes the freer-spending single-person households; and second because civil servants' households (which have been hit particularly hard by lower bonuses in recent years) are apparently dramatically overrepresented. The latter may be related to the onerous nature of the survey, which deters many families from participating: Respondents are paid a small fee for filling out a painfully detailed survey listing more than 1,000 specific items of expenditure.

It is also worth noting that the income data for the "all household" survey are simply taken from the worker household survey. In other words, they exclude all income received by households headed by "nonworkers" (those living on pensions, unemployment benefits, income from invest-

J.P. Morgan Securities Asia Pte. Ltd., Tokyo
Ryo Hino (81-3) 5573-1169
ryo.hino@jpmorgan.com

ments, etc.). This further skews the "all household" measures of propensity to consume, and means that savings rates derived from the survey are extraordinarily high—around 27%, versus roughly 5% when calculated from the most up-to-date GDP income statistics. The difference is largely accounted for by the fact that medical expenses paid by the state and private health insurers, together with imputed rent, are treated as consumption in the GDP report but are not captured in the household survey.

Current survey of commerce

Source: Ministry of Economy, Trade and Industry (METI)

Description: Based on a monthly survey of 17,000 distributors nationwide, the commercial sales report is split into wholesale and retail sales, with the latter also reported in terms of sales at large-scale stores (generally, those with a floor area of over 1,500 square meters), which incorporate department stores and chain stores (supermarkets), as well as a "total" index. Sales are broken down into major categories by item, and reported both in nominal values and index levels (2000=100). Large-scale store sales are also reported by geographical region. Data for convenience store sales are reported separately in an appendix to the report, both unadjusted and adjusted for changes in numbers of outlets.

Timing: Last part of the following month.

Seasonal/focus: All of the main categories of sales (not adjusted for changes in the number of outlets) are seasonally adjusted (X-12-ARIMA). Market focus is low, and the headline number is generally taken to be the over-year-ago large-scale retail store sales figure, adjusted for changes in the number of outlets, which is easiest to forecast. However, from a macroeconomic perspective, the unadjusted and "total" numbers are more important, as they should provide a better measure of economywide retail demand.

Revisions: A final report is released around the middle of the following month, though revisions are usually minor. The seasonal adjustments undergo a revision once a year.

Comments: An important monthly report for gauging private consumption, but the correlation between total retail sales and the corresponding GDP component in recent years is low. One problem is that the "total" survey's outdated (1997) sample, which is updated once every five years, means that it is increasingly fails to capture the full extent of spending, partly because new, smaller stores remain excluded. Structural changes in consumer preferences (in part, spurred by recent recessions) mean that spending is increasingly directed towards new and discount stores at the expense of larger and older established stores. Furthermore, retail sales do not strip out corporate purchases, a category that is constantly cited by the Japan Department Store Association as a major factor in the overall weakness of demand. In principle, this is not "retail" but rather wholesale trade. But department stores have maintained a large corporate client base over the years, as companies traditionally used them to procure clothing (uniforms) and interior goods (furniture) in bulk.

Consumer confidence survey (monthly)

Source: Economic and Social Research Institute (ESRI)

Description: The ESRI conducts a quarterly survey of 6,720 households nationwide (excluding foreign households). Those polled are asked to respond to statements that living conditions, incomes, employment, prices, and timing to purchase consumer durables will be better in six months' time. A weighted average of answers (strongly agree, slightly agree, neutral, slightly disagree, strongly disagree) is used to compile each index (50 is neutral), and an overall consumer sentiment index is calculated as the simple average of the four components (excluding prices). Responses are broken down by income group as well as region, and detailed information is provided on expenditure plans by item and amount for consumer durables, services, and travel and leisure, separated by type of household (farming, worker-headed, nonworking, and unemployed).

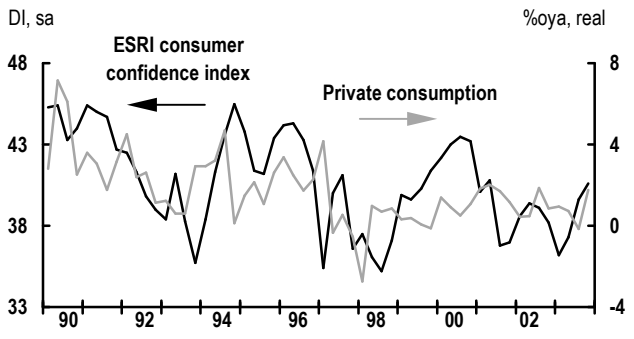
Timing: The surveys are conducted on the 15th of every month, with results released around the early part of the following month.

Seasonal/focus: Since the survey was recently completely overhauled, there is insufficient history to enable seasonal adjustment. Despite the other improvements made to the survey, market attention remains minimal.

Revisions: Revisions of the entire series are made every March, though they are usually minor.

Comments: This is the broadest of consumer surveys, and unlike its quarterly predecessor, the new monthly version is

Consumer confidence and GDP private consumption



J.P. Morgan Securities Asia Pte. Ltd., Tokyo
Ryo Hino (81-3) 5573-1169
ryo.hino@jpmorgan.com

very timely. The correlation between consumer confidence and GDP private consumption is very loose. However, the component indices are reasonably good at tracking total payroll growth (%oya), nominal contracted wages, and consumer price inflation. Hence, the survey can be regarded as a reliable gauge of the underlying consumer fundamentals. As with other diffusion indices in Japan, absolute levels are unimportant—although 50 is supposed to be neutral, the highest reading ever recorded was 50.8.

MoF corporate survey

Source: Ministry of Finance (MoF)

Description: This quarterly survey is based on the provisional financial statements of almost 25,000 nonfinancial firms capitalized at ¥10 million and over, and thus the survey sample is actually larger than the BoJ Tankan's. Details include major balance-sheet components and profit and loss accounts, many of which are broken down by sector and size of firm. All the data are historical, and no forward-looking or qualitative indicators are incorporated. An annual report is released each summer, covering all nonfinancial firms (that is, incorporating very small firms capitalized at under ¥10 million).

Timing: First part of third month following the quarter end.

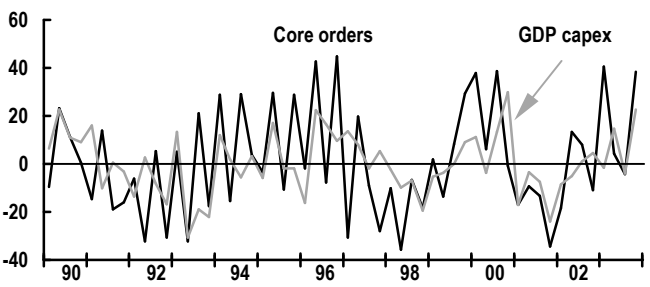
Seasonal/focus: MoF now provides seasonally adjusted data for the core indicators: sales, current profits, and capital spending. All other figures are not seasonally adjusted. The main focus of the report is capital spending because it is the primary demand-side input for calculating GDP capital spending in the 2nd preliminary estimates.

Revisions: The entire seasonally adjusted series is constantly revised.

Comments: The survey's population changes every April, implying a technical break between the Q1 and Q2 results each year. As a result some analysts prefer to focus on ratios such as recurring profit margins, though experience suggests that this is not strictly necessary. Attention has waned since the ESRI decided to publish the first preliminary GDP estimates earlier, and so could no longer incorporate the MoF capex figures in the first release. Nevertheless, they do have an impact on the GDP second estimates, and the MoF survey remains the primary source of quarterly profits and sales.

Machinery orders and nominal GDP capital spending

%q/q, saar



Machinery orders

Source: Economic and Social Research Institute (ESRI)

Description: This monthly report records the nominal value of machinery orders placed with 280 domestic machinery manufacturers, and is split up by ordering industry as well as into public-sector, foreign, and "agency" (technically untraceable, but primarily small business) orders. Orders by type of equipment (e.g., IT-related electronics and telecommunications) are also included, but are neither broken down into private, public, and foreign components nor seasonally adjusted. The ESRI also releases a quarterly survey forecast outlining machinery manufacturers' own expectations for the coming quarter.

Timing: Middle part of the month with a two-month lag.

Seasonal/focus: The headline figures are available in seasonally adjusted (X-11-ARIMA) form, along with the breakdown of orders by sector. Market attention is moderate, and focuses on "core" orders, which are domestic private orders, excluding those from shipping and electric utility companies because their orders tend to be large and thus skew the aggregates.

Revisions: None, but seasonal factors are reviewed annually with the release of the March report.

Comments: Machinery orders are regarded as the best forward-looking indicator of business capital spending, leading nominal GDP capex by around one quarter in recent years on a seasonally adjusted basis. This lead has notably decreased (it used to be two quarters) and is now even bordering on coincidence. Even so, considerable month-to-month volatility makes it necessary to assess the report on a trend (3-month moving average) basis or in over-year-ago terms. Care should be taken in interpreting the survey projections, as the ESRI follows a practice of adjusting firms' actual forecast by multiplying it against the "realization ratio" (the average percentage forecast error of the previous three quarters). As firms tend to overestimate orders in downturns and underestimate them in upturns, the ESRI's adjustment procedure provides misleading signals for several quarters following turning points.

J.P. Morgan Securities Asia Pte. Ltd., Tokyo
Ryo Hino (81-3) 5573-1169
ryo.hino@jpmorgan.com

Public works prepayment survey statistics

Source: East Japan Construction Surety (and others)

Description: This monthly series tracks the value of public works contracts signed by the central government, local governments, and affiliated agencies, broken down by type of ordering institution and region, in terms of both value and number of contracts.

Timing: Middle of the following month.

Seasonal/focus: Seasonally unadjusted data only. Market focus is nil, with no major newswires covering the report, in spite of the fact that the data are more timely and broader than the public construction order numbers. This is most likely a distribution issue, as this report is not readily available to the press in a timely fashion.

Revisions: None.

Comments: After seasonal adjustment (by the user), the contracts data correlate quite closely with GDP public investment on a 6-month moving average basis. However, this is only true for the final GDP figures; the report has not been a good predictor of the preliminary GDP estimates recently.

Integrated statistics on construction works

Source: Ministry of Land, Infrastructure and Transport (MLIT)

Description: This is an amalgam of the MLIT's various data releases and features a total of the nominal value of construction activity on a monthly basis.

Timing: Middle of the following month.

Seasonal/focus: There are no seasonally adjusted data. As with most construction data, market interest is minimal, though the public-sector component is a direct input for calculating GDP public investment.

Revisions: There do not appear to be frequent revisions so far. However this data release is quite new, and further evolution could lead to changes.

Comments: Although the report has direct implications for the GDP figures, the inclusion process is by no means straightforward, and thus creates more confusion for the market. For forecasters, the biggest difficulty is that the final month of the quarter is not released in time for the GDP first estimates. This adds to the margin for error, on top of the seasonal adjustment and deflator factors.

Construction orders

Source: Ministry of Land, Infrastructure and Transport (MLIT)

Description: The report details orders received by 50 large construction firms, with breakdown by orderer (private manufacturers, nonmanufacturers, the central government, and local governments), type (buildings versus civil engineering projects), and region; all by value and floor area. A more detailed report with broader coverage (470 firms) is published with the subsequent month's report.

Timing: Latter part of the following month.

Seasonal/focus: The report includes only raw (nsa) data, though (Census X-11) adjustment is available on the MLIT's website. Market focus is low, as it is generally not perceived as an important macroeconomic indicator.

Revisions: Seasonally adjusted data are revised annually.

Comments: Monthly figures are highly volatile, and forecast errors large, but the trends are useful advance indicators of fixed investment. Independently seasonally adjusted component series correlate reasonably well with the respective private business and public investment components of GDP, generally with a one-quarter lead. However, the construction orders data correlate less well with GDP public investment than the public works contracts numbers (above); this can be largely put down to much narrower coverage, even for the broader orders survey.

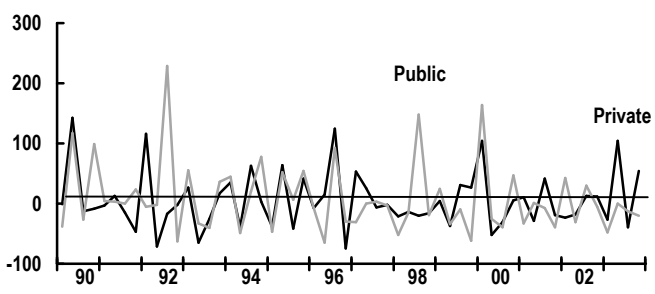
Housing starts

Source: Ministry of Land, Infrastructure and Transport (MLIT)

Description: Monthly data on new housing units are divided up by purpose of start (owner-occupied housing, built-for-sale, built-for-rent, and employee housing), and source of funding (private, the government's Housing Loan Corporation [which provides around 40% of all new-home mort-

Construction orders

%q/q, saar



J.P. Morgan Securities Asia Pte. Ltd., Tokyo
Ryo Hino (81-3) 5573-1169
ryo.hino@jpmorgan.com

gages], and other public lenders). Starts of both residential and nonresidential buildings are also reported in floor space.

Timing: The main series are provided seasonally adjusted (Census X-11). The figures attract little attention from the market; the main focus for analysts who use them is on over-year-ago changes and the annualized total.

Seasonal/focus: The main series are provided in seasonally adjusted (Census X-11) annualized terms. The figures attract very little attention from the market, though the main focus for analysts is on the over-year-ago changes and the annualized figure.

Revisions: Like the construction orders figures, the seasonally adjusted series are revised once a year.

Comments: This is the only leading monthly indicator of residential investment; however, time lags vary and quality characteristics (composition and floor space) need to be taken into account. The floor space figures are the most relevant for tracking real GDP residential investment; a six-month moving average has a reasonably good correlation. But, like the public works contracts figures, the series is more useful for tracking the final GDP figures; the GDP preliminary estimates are based on the broader construction starts survey. And the residential component is no better at predicting GDP residential investment. At only 5% of GDP, and with a downtrend in recent years, housing is not regarded as a crucial swing factor for growth.

Customs-cleared trade

Source: Ministry of Finance (MoF)

Description: The comprehensive monthly trade report covers yen-denominated trade by commodity and country. In value terms, exports are counted free on board (f.o.b.), and imports at cost including insurance and freight (c.i.f.). Indexed volume data (2000=100) are also included, as well as a breakdown by region.

Timing: First 10-day import and export data are released shortly before the end of the month, and first 20-day data in the early part of the following month. However, no breakdown beyond total export and import values is given before full-month figures are released in the fourth week of the following month.

Seasonal/focus: Aggregate import and export trade values are released on a seasonally adjusted (Census X-11) as well as unadjusted basis. The market focus is relatively high, and concentrates on the over-year-ago rates of change in the full-month surplus, as well as its seasonally adjusted level. Export and import volume figures are available, but not seasonally adjusted.

Revisions: Frequent, but usually minor.

Comments: Considerable month-to-month volatility means that merchandise trade figures are best analyzed as smoothed data series (e.g., 3-month moving averages or longer). The first 10-day figures are extremely noisy, and therefore not worth watching closely, but the first 20-day figures are used by analysts as the main guide to the full-month result. But since the headline figures are nominal, the volume indices are more relevant for tracking real GDP exports and imports.

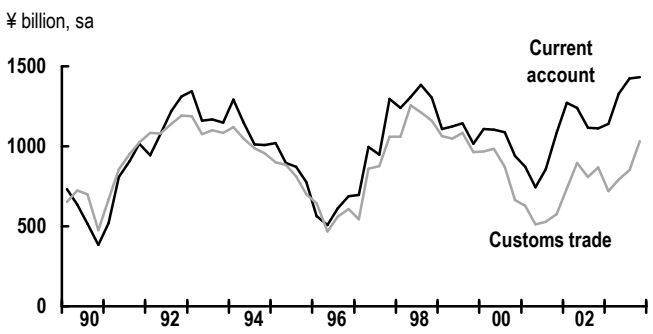
Balance of payments

Source: Ministry of Finance (MoF)

Description: This monthly report provides a detailed yen-denominated breakdown of the current account in terms of merchandise trade, services, and income account flows, as well as the capital account. The merchandise trade surplus differs only slightly from the customs-cleared definition (the main factor being a different method of seasonal adjustment). The service deficit is currently around 1.2% of GDP, and is made up primarily of travel.

The service deficit is falling over time, reflecting structural adjustment and a maturing of the domestic service sector (particularly financial and other business services), and royalties and license fees. The income surplus was worth 1.2% of GDP in 1999, reflecting net investment income on foreign assets. Importantly, the J-curve effects for income are different from those for trade and services, with net investment receipts falling immediately the yen rises, reflecting capital losses from exchange rate appreciation. Thus, the J-curve for the current account records an immediate deterioration, followed by a response in line with that for the trade balance. Current transfers consist largely of international development aid and contributions to international organi-

Current account and customs trade surpluses



J.P. Morgan Securities Asia Pte. Ltd., Tokyo
Ryo Hino (81-3) 5573-1169
ryo.hino@jpmorgan.com

zations and private remittances—a small and generally stable component of the current account.

Current account balance

% of nominal GDP (2002)

Current account	2.8
Goods & services	1.3
Exports	9.9
Imports	7.5
Services	(1.0)
Income	1.7
Current transfers	(0.1)

*Figures in parentheses denote deficits

In the capital and financial account, portfolio flows attract the most market attention, primarily owing to their timeliness (contract-base figures are released weekly). However, security investment is only a part of the financial account, and is often not even a major driver. Other components include FDIs, cross-border flows of currency and deposits, as well as loans.

Timing: Around the 10th of the second following month.

Seasonal/focus: The main series are provided in seasonally adjusted (X-12-ARIMA) format, which are actually produced by the BoJ. The Bank also provides a seasonally adjusted breakdown of the income and services account subcomponents (whereas the MoF does not). Market focus is generally low, as the current account surplus generally moves in line with the merchandise trade data, which are released several weeks in advance.

Revisions: Modest and regular, at end of following quarter, plus an annual review of seasonal factors released with the March report.

Comments: Considerable month-to-month volatility of unknown components (all except goods trade) makes accurate forecasting difficult. Weekly reports on inward and outward security investment are used to try to anticipate trends in the portfolio accounts.

Consumer price index

Source: Ministry of Public Management, Home Affairs, Posts and Telecommunications (MCA)

Description: The monthly CPI tracks prices in the Tokyo area and nationwide, and provides detailed breakdown of goods and service price inflation. Prices for a closely specified basket of 598 items are surveyed at 31,000 retail outlets and service establishments nationwide. Goods account for 50.8% of the overall index by weight. Mortgage interest rates are not included; rental costs are captured, and are used as the basis for calculating imputed costs of owner-occupied residences. Generally, the surveys are conducted in the middle part of the month (specifically on the Wednesday, Thursday, and Friday of the week that includes the 12th), though fresh food prices, because of their extreme volatility, are surveyed three times (during the last three days of the weeks including the 5th, 12th, and 22nd). The base year of the index was last updated to 2000, and since that revision the sample coverage includes personal computers and digital cameras to better reflect current pricing conditions. A hedonic regression method is used to account for quality changes in these new items, but not yet for the rest of the market basket.

Timing: Tokyo figures are released at the end of the same month, in tandem with nationwide figures for the previous month.

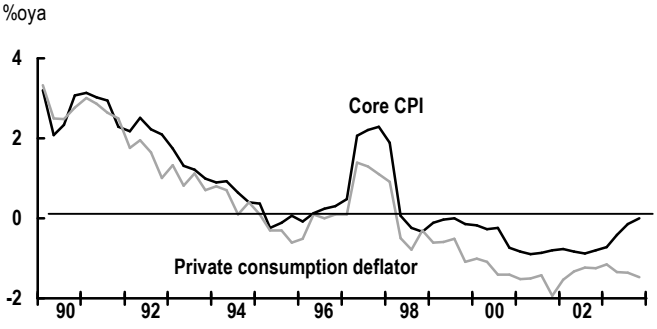
Seasonal/focus: Headline indices are seasonally adjusted (Census X-11), but details of the report are unadjusted. Market attention centers on over-year-ago changes in the Tokyo "core" (excluding fresh food but including energy) and overall measures. But the series with the highest implications for BoJ policy is the core nationwide index, as the Bank now has a policy commitment to maintain zero rates until the over-year-ago change in the nationwide index stabilizes at zero or above.

Revisions: Seasonal adjustments are revised once a year.

Comments: The official CPI measure comes in for criticism on two fronts: firstly for overestimating prices, and second for asymmetric stickiness. BoJ studies have substantiated these criticisms, with one finding an upward bias of 0.9% in the headline measure and another documenting clear evidence of downward price rigidity (i.e., prices fall more slowly than they rise). In order of significance, these problems can be traced back to: inadequate adjustment for quality changes (which accounted for 0.7% of the 0.9%-point bias in the BoJ study), the exclusion of many new products (though this has improved with the latest basket revision in 2001), failure to measure prices in new channels of distribution, and failure to adjust for nonpecuniary discounting (the use of money-off coupons).

The MCA uses a simple fixed-weight, arithmetic mean (Laspeyres) formula to calculate the CPI on the basis of a prespecified basket of goods (many of them brand-specific) and services at a preselected number of outlets. As few adjustments are made between the five-yearly sample revi-

Consumer prices and GDP private consumption deflator



J.P. Morgan Securities Asia Pte. Ltd., Tokyo
Ryo Hino (81-3) 5573-1169
ryo.hino@jpmorgan.com

sions and index rebasing (unlike the BoJ's practice in compiling corporate goods prices), ongoing quality improvements are not reflected in the headline index, and changes—be they short-term or structural—in consumer behavior in response to relative price fluctuations (substitution effects, particularly moves to cheaper generic products) with the appearance of new or similar products or new distribution channels not accounted for. Weightings are also simply based on the MCA's family income and expenditure survey, meaning that differences in the spending patterns of single-person households are not taken into account. Short-term price discounting is not captured unless it coincides with the short, midweek survey period, and continues for at least one full week.

Corporate goods price index

Source: Bank of Japan (BoJ)

Description: The monthly CGPI (formerly the Wholesale Price Index) is a measure of goods traded among companies. Data in the report are provided both by product and broken down by stage of production (raw materials, intermediate goods, and final demand products, the last of which is further subdivided into capital goods, and durable and nondurable consumption goods). Export and import prices are also released as separate indices.

Timing: Eighth working day of the following month.

Seasonal/focus: Figures are not seasonally adjusted and the focus is on the domestic CGPI. The index is affected by seasonal movements, such as in electricity prices, which rise in July and fall in October. Market focus is low.

Revisions: Unlike the old WPI, the new release is officially on a preliminary basis. A final report for the previous month is released at the same time, which contains some revisions (though usually minor).

Comments: Like the CPI, the survey uses a conventional Laspeyres formula. However, adjustments are made to take account of changes in quality. Indeed, in the case of computers and some other goods whose quality changes are difficult to estimate, a hedonic approach has been applied. For reference, the BoJ also provides a chain-weighted index for the domestic CGPI.

Corporate service price index

Source: Bank of Japan (BoJ)

Description: The monthly CSPI series was launched in 1991, with a retroactive index dating to 1985, to supplement the CGPI by measuring prices of services traded among corporations. A single index covers both domestic and imported services, primarily because the volume of imported and exported services does not warrant separate compilation. The survey covers 102 items nationwide, with a sample base of 2,942 as of December 2001; the latest (1999) revisions incorporated mobile telephone charges and Internet access prices in the sample prices.

Timing: Latter part of the month.

Seasonal/focus: Not seasonally adjusted, though components such as advertising prices display marked seasonality. The BoJ has recently added a domestic supply-demand component series, which strips out domestic services whose pricing changes are relatively static (compulsory motor vehicle insurance, railroad, bus, taxi, and domestic air transportation) as well as overseas factors (ocean/air freight, international air passenger transportation). This component corresponds most with the domestic DCGPI. Market attention remains low and few analysts forecast the index.

Revisions: Monthly revisions are negligible, though the series is revised twice a year, and there is also the rebasing of the index every five years, which coincides with a review of the selection of prices surveyed.

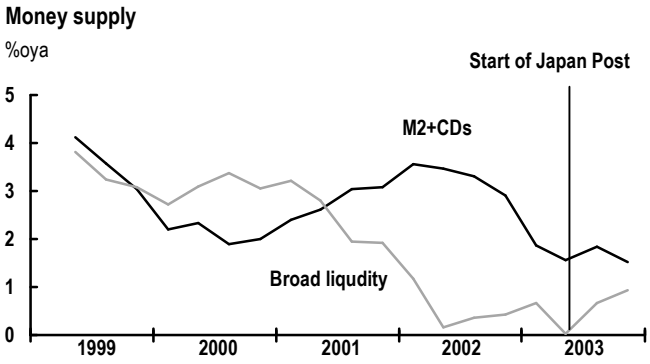
Comments: As with the CPI and CGPI, the CSPI index formula uses a Laspeyres index which, over time, tends to overstate inflation. Compared with tangible goods, the measurement of service price changes, particularly at the inter-enterprise level, is difficult because of the heterogeneity of transactions and lack of an organized market. Quality changes are also difficult to measure, and so a hedonic regression method is not used for the CSPI.

Money supply

Source: Bank of Japan (BoJ)

Description: Narrow and broad monthly money supply measures reflect gradations of liquidity or "spendability" of financial assets held by so-called "moneyholders" (nonfinancial institutions, individuals, and local governments): M1 (currency in circulation plus demand deposits); M2+CDs (M1 plus nondemand bank deposits and certificates of deposit); and broad liquidity (M2+CDs plus postal savings and money deposits at other financial institutions, bonds with repurchase agreements, money and loan trusts, government bonds, investment trusts [both bond and stock], and foreign bonds [domestic corporate bonds are excluded ostensibly on the basis of insufficient liquidity]). As of April 2003, the BoJ began providing details of all components of broad liquidity as well as the narrower aggregates.

J.P. Morgan Securities Asia Pte. Ltd., Tokyo
Ryo Hino (81-3) 5573-1169
ryo.hino@jpmorgan.com



The sharp deceleration in broad liquidity from April 2003 was the result of a change in definition after Japan Posts was established (transforming the postal service into a public corporation). The Postal Life Insurance Welfare Corporation was dissolved, and its assets (which were a part of broad liquidity) transferred to Japan Posts (which are not).

Timing: Middle of following month.

Seasonal/focus: The two main series (M2+CDs and broad liquidity) are seasonally adjusted (X-12-ARIMA) and expressed in annualized terms, but the market focus is on oya change in M2+CDs measure.

Revisions: The previous two to three months' figures are frequently revised. Changes in M2+CDs tend to be relatively small, but certain components in broad liquidity are prone to frequent and large revisions, such as government bonds and investment trusts.

Comments: The usefulness of M2+CDs in tracking the cycle has diminished with recent years' financial instability, which promoted a sharp increase in liquidity preference (followed by payback in the form of a long-term shrinkage of both sides of the balance sheet, as on-hand liquidity was used to pay back existing loans as credit concerns subsided), coupled with more recent corporate restructuring, in which firms use existing cash flow to finance capital spending while continuing to repay excess debt. Policy changes also have a dramatic impact; namely, the move to lift the government's unlimited guarantee on bank deposits, which causes a huge shift in funds from a category that is no longer covered by the blanket guarantee to another product that is still guaranteed. The final phase of the guarantee dissolution is slated for April 2005. The BoJ still publishes a quarterly projection for M2+CDs growth, although this has no status as a *de facto* target: The broad reference range is periodically breached without triggering policy action or comment.

Monetary base

Source: Bank of Japan (BoJ)

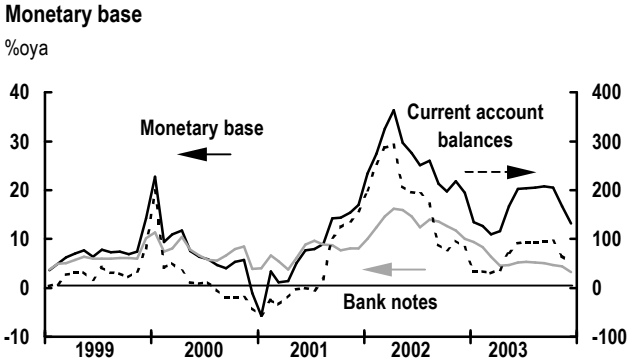
Description: The monetary base is defined as "currency supplied by the Bank of Japan," consisting of bank notes and coins in circulation, plus the current account balances held at the BoJ. Since the BoJ switched its operating target from interest rates to liquidity provision, the monetary base figures provide the most immediate indication of the impact of monetary policy.

Timing: Second business day of the following month.

Seasonal/focus: The overall monetary base is seasonally adjusted, and month-on-month changes are expressed in annual terms. However, the components are not seasonally adjusted and thus the changes are expressed in oya terms. Market attention is minimal.

Revisions: The seasonally adjusted series is revised every February.

Comments: There does not seem to be a strong consensus on the implications of a swing in monetary base growth. The BoJ holds the view that it cannot use the monetary base as a vehicle to control, or even affect money supply growth, as currency in circulation makes up only 19% of M1.



J.P. Morgan Securities Canada, Toronto
Ted Carmichael (1-416) 981-9115
ted.carmichael@jpmorgan.com

Canada

The monthly data cycle

Same month	Following month	Second following month
	1st to 10th	**1st to 10th**
	Housing starts	Building permits
	Ivey purchasing managers survey	
	Labor force report	
	New motor vehicle sales	**10th to 20th**
		International trade
	10th to 20th	Manufacturing report
	Composite leading indicators	New housing price index
	Consumer price index	Wage settlements
	After 20th	**After 20th**
	Industrial product price index	Employment, earnings and hours
	Monetary aggregates	Retail sales
		Real GDP at factor cost and industrial production
		Employment insurance claims
		Wholesale sales

The quarterly data cycle

Following month	Second following month	Third following month
Business conditions survey (taken in middle 10 days of January, April, July and October)	Current account	Industrial capacity utilization rates
	GDP (income and expenditure accounts)	Labor productivity, compensation and unit labor cost
	Investment in nonresidential construction	

Semiannual data

	Second following month
	After 20th
	Private and public investment intentions

J.P. Morgan Securities Canada, Toronto
Ted Carmichael (1-416) 981-9115
ted.carmichael@jpmorgan.com

Gross domestic product

Source: Statistics Canada

Description: Quarterly expenditure-based accounts are provided in current and constant Canadian dollars, along with the deflators. Currently the base year is 1997 and the data are chain-weighted. Quarterly financial flow of funds accounts are published simultaneously. Annual provincial GDP estimates and the national balance sheet are published in June with an additional year's delay.

Timing: The first estimate is on the last business day of the second month following the quarter's end. Data revisions are provided in the next quarter's report, except for the first-quarter report, which includes four years of annual revisions.

Seasonal/focus: All data are provided in seasonally adjusted form as well as unadjusted. Market focus is on the quarter on quarter percentage change at annual rates.

Revisions: First round of revisions normally modest; revisions for the past four years, included in the first quarter release, are often major.

Comments: Statistics Canada provides chain-weighted estimates of both real GDP and the GDP deflator. Details of the report are available electronically with commentary and statistical highlights provided in the Canadian economic accounts quarterly review. Monthly indicators, properly evaluated, provide an excellent basis for estimating quarterly GDP.

GDP composition in 2003

% of current $ total		*% of constant $ total*	
Expenditure basis		**Output basis**	
Total GDP	100.0	Total GDP	100.0
Private consumption	56.5	Goods industries	31.3
Govt consumption	19.5	Industrial production	23.6
Fixed investment	19.5	Mining	3.6
Government	2.6	Manufacturing	17.4
Business	16.9	Utilities	2.6
Residential	6.1	Construction	5.4
Nonresidential	4.2	Other goods production	2.4
Plant & equipment	6.6	Services industries	68.7
Change in inventories	0.6	Trade	11.7
Exports	37.9	Finance	20.1
Imports	-33.9	Education & health	10.5
		Other business sector	26.4
		Nonbusiness sector	15.3

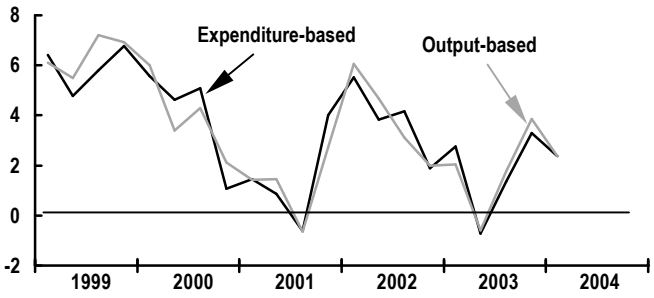
Monthly GDP and industrial production

Source: Statistics Canada

Description: This output-based measure of GDP is the most comprehensive monthly indicator of economic activity. Industrial production is one component, but the aggregate covers all goods and service producing industries (including mining; manufacturing; construction; retail and wholesale trade; community, business, and personal services; and government administration). Subaggregations include business vs. nonbusiness GDP, industrial production, and durable vs. nondurable manufacturing output. Estimates of industry outputs are derived from numerous monthly surveys of industrial establishments, including the manufacturing report, retail and wholesale trade, payroll survey and many others. Results of these surveys are helpful in forecasting monthly GDP.

Real GDP

%ch at annual rate over 1 quarter



Timing: Last business day of second following month.

Seasonal/focus: All data are seasonally adjusted. Market focus is on the monthly percent change.

Revisions: Revisions of the previous few months' data are common; a benchmark revision is done in June.

Comments: Despite the revisions, the monthly GDP figures provide a valuable tool for forecasting quarterly expenditure-based real GDP. Since the output and expenditure measures of GDP must reconcile, the monthly GDP data are a useful check on the exercise of adding up estimates of the expenditure aggregates, based on monthly surveys of retail trade, net exports, inventories, etc. In addition, the monthly GDP data provide an important breakdown of economic activity by industrial sector, which is unrivalled among large industrial countries.

Industrial capacity utilization rates

Source: Statistics Canada

Description: Quarterly industrial capacity use in nonfarm goods producing industries. Capacity use is the ratio of actual output to estimated potential output which, in turn, is based on measures of industry capital stock. Data are available for forestry, mining, manufacturing, construction, and

J.P. Morgan Securities Canada, Toronto
Ted Carmichael (1-416) 981-9115
ted.carmichael@jpmorgan.com

utilities. Changes in capacity utilization can be estimated from quarterly changes in the monthly industry GDP data.

Timing: Second week of the third month following the end of the quarter. This is two weeks after the quarterly industry GDP data, permitting fairly accurate forecasts of changes in capacity use.

Seasonal/focus: Data are seasonally adjusted, and market focus is on changes in total and manufacturing capacity use as well as comparisons with previous cyclical peaks or troughs.

Revisions: Data are subject to revisions, reflecting revisions in monthly GDP data and revised estimates of capital stocks from the semiannual survey of private and public investment intentions.

Comments: Capacity utilization rates provide a good measure of the cyclical state of the economy and are useful in gauging the degree of cyclical pressure on producer prices.

Manufacturing report

Source: Statistics Canada

Description: A monthly survey of 11,000 establishments reporting their monthly shipments, inventories and unfilled orders. The stratified sample makes up about 45% of the total population of manufacturing establishments. Unfilled orders represent the backlog of orders that will contribute to future shipments if the orders are not cancelled. New orders are derived residually from the estimates of shipments and unfilled orders.

Timing: From the 10th to the 20th of the second following month. Usually two weeks ahead of monthly GDP report, for which the manufacturing report is a key input.

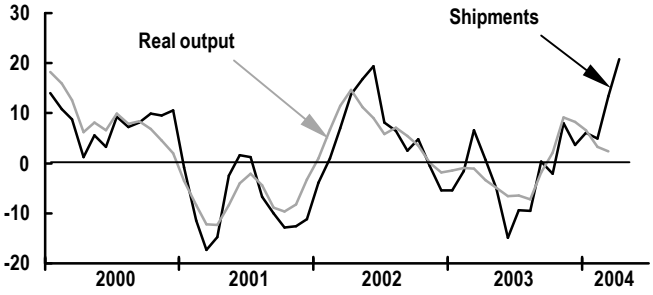
Seasonal/focus: Data are seasonally adjusted, and market focus is on monthly changes of shipments, new orders and unfilled orders.

Revisions: Data are less timely than the US factory report, which, in fact, is a useful input in forecasting Canada's manufacturing data due to the high degree of integration in the two countries' manufacturing sectors. Monthly reports include revisions to the previous three months. Annual revisions can be large and are included in the April report; they are benchmarked to the annual census of manufacturers. For example, in April 2003 annual revisions were done based on the 2001 census of manufacturing establishments.

Comments: The report is useful in forecasting the change in manufacturing output, which can be roughly estimated as the change in the sum of shipments plus finished goods inventories deflated by the change in the industrial product price index. It is also useful, along with the wholesale trade report, in monitoring inventories as an input to the quarterly GDP forecast.

Manufacturing shipments and real output

%ch over 3 months of 3-month ma, saar



Composite leading indicators

Source: Statistics Canada

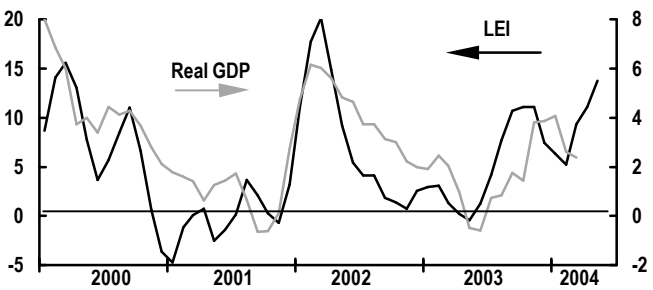
Description: An index of ten indicators that tend to lead turning points in the economy. The indicators include a housing index, services employment, stock prices, real money supply, the US leading indicator, three manufacturing indicators, and two retail indicators. To avoid false signals, Statistics Canada has developed a smoothed index using statistical filtering techniques, which approximates a five month moving average. Unsmoothed data are also available, which though volatile, are useful in assessing recent developments in key sectors of the economy.

Timing: In the second half of the following month. The index is reported for the immediately preceding month, but the US leading indicators are for the month prior to that, and the manufacturing and retail components are for two months prior.

Seasonal/focus: Data are seasonally adjusted, and market focus is on the month-over-month change in the smoothed and unsmoothed indexes.

Unsmoothed leading indicator and real GDP

%ch over 3 months of 3-month ma, saar



J.P. Morgan Securities Canada, Toronto
Ted Carmichael (1-416) 981-9115
ted.carmichael@jpmorgan.com

Revisions: Data are revised for the previous few months as new information becomes available.

Comments: The smoothed index sacrifices current information in the interest of avoiding turning point errors. However, because of the comprehensive coverage of the indicator, the change in the three-month moving average provides a good reading on the latest growth trend in the economy.

Wholesale sales

Source: Statistics Canada

Description: This monthly survey of 8,500 wholesale establishments provides information on the performance of the wholesale trade sector. The wholesale trade sector comprises establishments primarily engaged in wholesaling merchandise and providing related logistics, marketing and support services. The survey presents estimates of monthly sales and inventory levels for wholesale merchants. The target population is wholesale merchant establishments, excluding those engaged in wholesaling grain and petroleum products. Beginning with the release for April 2004, estimates of the survey are classified according to the North American Industry Classification System (NAICS 2002). Before that, it was based on the Standard Industrial Classification (SIC) of 1980. The NAICS 2002 and SIC are not comparable. Therefore, Statistics Canada produced the NAICS-based historical series from January 1993 to March 2004 .

Timing: Around the 20th of the second following month.

Seasonal/focus: Seasonally adjusted data are available.

Revisions: Raw data are revised, on a monthly basis, for the month immediately prior to the current reference month being published. Revisions for the previous three months are common. At the end of every calendar year, seasonally adjusted figures are revised to equal the sum of the unadjusted estimates. Revisions for the previous year are released in the May report.

Comments: This survey provides information on the performance of the wholesale trade sector which is a useful input to the monthly GDP forecast. Wholesale inventory data are also an important component of the inventory forecast for quarterly GDP.

Labor productivity, compensation, unit labor cost

Source: Statistics Canada

Description: Quarterly estimates of labor productivity measured as the ratio of output to labor input (hours worked). The estimates are derived from a Fisher chained index of the GDP, value added, in the business sector. Economic performance as measured by labor productivity must be interpreted carefully, since these estimates reflect changes in other factors of production in addition to the growth of productive efficiency.

Labor compensation includes all payments in cash or in kind made by domestic producers to persons as remuneration for work. This includes salaries and supplementary labor income of paid workers, plus an imputed labor income of self-employed workers.

Unit labor cost is the labor cost per unit of output. It is calculated as the ratio of labor compensation to real value added. It is also the equivalent of the ratio of labor compensation per hour worked to labor productivity. The unit labor cost will increase when hourly compensation rises faster than labor productivity.

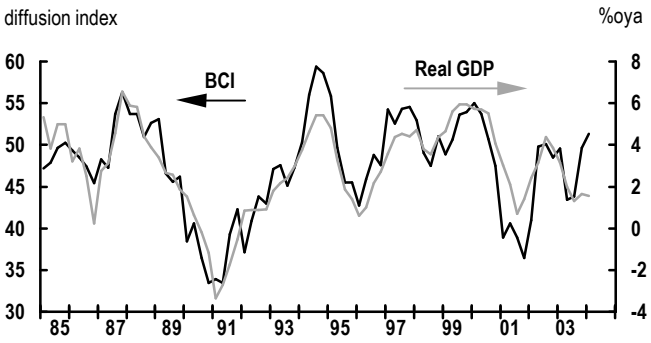
The report provides information by industry over time on the primary inputs (capital and labor), the intermediate inputs (energy, materials and services) and output valued in terms of both current and constant prices.

Timing: Released on the middle of the third month following the reference quarter.

Seasonal/focus: Focus is on seasonally adjusted quarterly changes in productivity and unit labor cost.

Revisions: The quarterly productivity estimates provide a preliminary indication of recent productivity trends in the Canadian economy. These data are produced on the basis of preliminary gross domestic product (GDP) estimates, which are eventually revised when additional and more precise information on the National Accounts becomes available. This revision cycle lasts four years. The revisions that are published in 2004 therefore go back to 2000.

Business conditions index and real GDP



J.P. Morgan Securities Canada, Toronto
Ted Carmichael (1-416) 981-9115
ted.carmichael@jpmorgan.com

Comments: Productivity—the efficiency with which the economy transforms inputs into outputs—is important as it largely determines real income changes. The productivity growth rate influences how fast real incomes can rise.

Business conditions survey

Source: Statistics Canada

Description: A quarterly survey of about 9,000 manufacturers on their views of current conditions, their expectations about future production and employment, and sources of production difficulties. Responses are weighted by the manufacturer's share of shipments or employment. The questions are similar to those in the US Institute for Supply Management (ISM) survey.

Timing: The survey is conducted in the first two weeks of January, April, July, and October and is released in the first few days of the following month.

Seasonal/focus: Statistics Canada reports survey results as the difference between the shares of positive and negative responses to each question, providing no summary measure. Consequently, the report itself has little focus. However, JPMorgan combines survey results into a single diffusion index analogous to the US ISM Index. Readings on the index above 50 point to an expanding manufacturing sector, while readings below point to contraction.

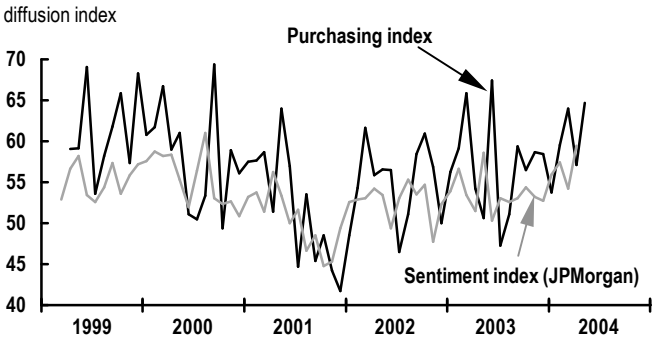
Revisions: Modest revisions to seasonal adjustment factors only.

Comments: This survey, which is gaining a higher profile, provides an excellent early read on the quarter as it begins. It has also reliably anticipated major cyclical turning points in real GDP growth.

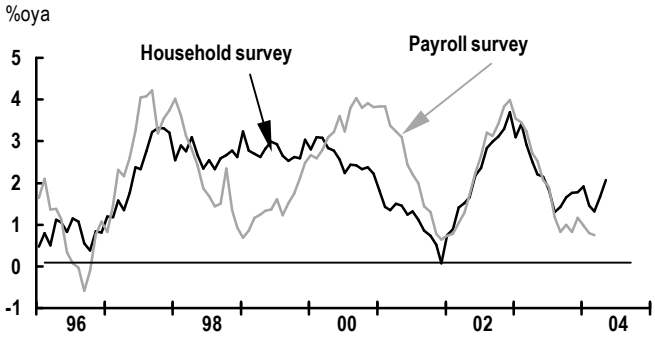
Ivey purchasing managers survey

Source: Richard Ivey School of Business, University of Western Ontario

Ivey purchasing managers' index



Employment



Description: This monthly report measures changes in dollar purchases as indicated by 175 purchasing managers from across Canada. The participants have been selected geographically and by sector of activity. The index includes both the public and private sectors, and both manufacturing and nonmanufacturing companies. Participants indicate whether their organization's activity is higher than, the same as, or lower than the previous month across five categories: purchases, employment, inventories, supplier deliveries, and prices.

Timing: Released seven days after the first working day of the following month.

Seasonal/focus: Based on end of month data and not adjusted for seasonal factors.

Revisions: No revisions.

Comments: JPMorgan calculates a "sentiment index," based on the four activity-related questions in the Ivey survey. The sentiment index is less volatile than the headline purchasing index and is somewhat better correlated with real GDP trends.

Labor force report

Source: Statistics Canada

Description: A monthly report based on a survey of 54,000 households. Reports total employment, broken down by sector (e.g., agriculture, manufacturing, construction, and services), province, age, sex, and full-time versus part-time work status. Also reports the number of people in the labor force and unemployment (in numbers and percent of work force).

Timing: Usually released on the first Friday of the following month. If Friday falls in the first two or three days of the month, then release is usually delayed to the second Friday of the month. Release time is 7:00 a.m., unlike most Canadian data, which are released at 8:30 a.m.

J.P. Morgan Securities Canada, Toronto
Ted Carmichael (1-416) 981-9115
ted.carmichael@jpmorgan.com

Seasonal/focus: Seasonally adjusted data are provided. Market focus is on the monthly change in employment and on the unemployment rate.

Revisions: No revisions of raw data except for census benchmarking. Seasonal factors are revised each year in the January report, released in early February.

Comments: Employment data provide the first economywide indication of how the economy performed in the previous month. Because the release is on the same day as the US employment report, the Canadian data are often overshadowed by market reaction to the US data. Canada's household survey estimates of employment tend to be more volatile than the US establishment survey of nonfarm payroll employment.

Employment, earnings and hours

Source: Statistics Canada

Description: This monthly survey uses a stratified random sample of 11,000 establishments out of a population of 900,000 establishments. A one-twelfth rotation of the sample is done every month. In addition to providing the principal input to labor income estimates for the national accounts, it also serves as a proxy output measure for about 15% of GDP.

Timing: End of the second following month.

Seasonal/focus: Data provided are seasonally adjusted. Market focus is on over-a-year-ago changes on average weekly and hourly earnings and month-on-month changes on the levels of payroll employment and average workweek.

Revisions: Preceding month's data usually revised. On an annual basis, seasonally adjusted data are revised back and released with the December revised reference month. From time to time, a historical revision is made for changes related to new data sources and revised industry classifications and frame changes.

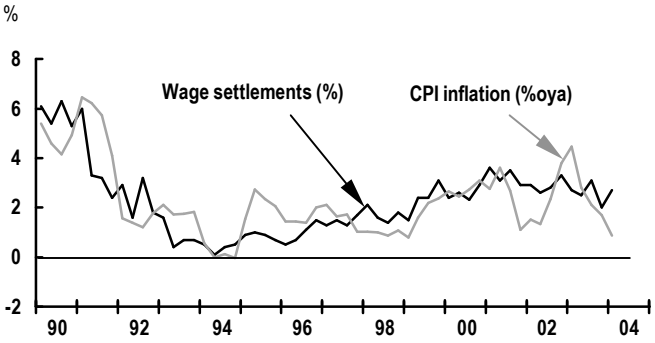
Comments: Contains useful data on payroll employment but is not timely enough to attract market attention.

Wage settlements

Source: Human Resources Development Canada

Description: A monthly report on wage settlements negotiated in collective bargaining agreements. The results are presented by region and industry as well as for the private and public sectors. Bargaining units are broken down into small (100-499 employees), medium-sized (500-1,999), and large (2,000 and more) units. Industry sectors are devised within the framework of the North America Industry Classification System (NAICS). Coverage for major settlements involves approximately 1,070 agreements covering 2.5 million employees. The employee coverage represents about 60% of the unionized work force and 20% of nonagricultural paid employment. The "base rate" is the wage rate of the lowest paid classification containing a significant number of qualified workers in the bargaining unit. Wage adjustments are the average annual percentage adjustment in base rates over the term of the agreement in settlements negotiated during the period shown. The average is obtained by weighting individual settlements by the number of employees affected. The adjustments include estimated cost-of-living allowance payments calculated at a projected 2% inflation rate.

Wage settlements and CPI inflation



Timing: Around the middle of the second following month.

Seasonal/focus: Data for the latest month is preliminary. Focus is on the average annual adjustment of all industries and jurisdictions, and in public and private sectors.

Revisions: Preliminary data are often slightly revised the following month.

Comments: The Bank of Canada monitors wage settlements as a more forward-looking assessment of wage trends than that provided by average hourly earnings data.

Retail sales

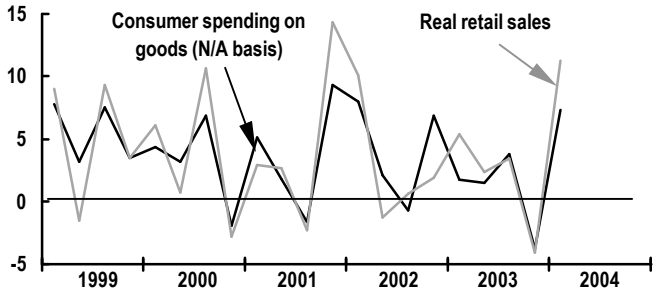
Source: Statistics Canada

Description: This monthly survey collects retail sales by province, in current and constant dollars, from a sample of 12,000 retailers. Sales estimates obtained from retailers are a key monthly indicator of consumer purchasing patterns, as retail stores sales accounts for around 50% of consumer spending. Retail sales estimates do not include any form of direct selling that bypasses the retail store. Internet retail

J.P. Morgan Securities Canada, Toronto
Ted Carmichael (1-416) 981-9115
ted.carmichael@jpmorgan.com

Real retail sales and consumer spending on goods

%ch, q/q, saar



activities are included in the survey only when conducted through the same legal structure as the retail establishment. Starting the release of the report for April 2004, data collected are classified according to the North American Industry Classification System (NAICS 2002), which is not comparable to the previously used Standard Industrial Classification (SIC 1980). Therefore, Statistics Canada provides a new set of data series which dated back to January 1991.

Timing: After the 20th of the second following month.

Seasonal/focus: Totals are provided seasonally adjusted, and market focus is on month-over-month change.

Revisions: Raw data are revised every month for the month immediately prior to the current reference month being published. In addition, revisions are made once a year, with the release of the preliminary February data, for all months in the previous year.

Comments: Retail sales data can be distorted by indirect tax changes: this happened with the replacement of the Manufacturers' Sales Tax with the Goods and Services Tax in January 1991, and the massive cut in tobacco taxes in February to May 1994. Nevertheless, constant dollar retail sales is the best guide to estimating current quarter consumer expenditure.

New motor vehicle sales

Source: Statistics Canada and DesRosiers Automotive Consultants Inc.

Description: Monthly sales (in dollars and in units) of new motor vehicles, covering both domestic and imported vehicles. Since there are approximately 3,600 new car dealers in Canada, to save time and costs, Statistics Canada asks Canadian automobile manufacturers, as well as importers of vehicles manufactured overseas, to complete the survey. The respondents provide consolidated totals of their dealers' monthly reports on sales of new motor vehicles.

Timing: DesRosiers Automotive reports industry statistics in the first few business days of the following month. Official estimates are available from Statistics Canada around the middle of the second following month.

Seasonal/focus: Industry data are provided in unadjusted form, with focus on over-year-ago changes. However, these data can be seasonally adjusted using Statistics Canada's seasonal factors to arrive at good approximations of month-over-month changes.

Revisions: Official Statistics Canada estimates are revised every month for the month immediately prior to the current reference month being published. In addition, revisions are made once a year, with the release of the February data for the first time, for all months in the previous year.

Comments: Important as the first monthly indicator of consumer spending. The statistics not only help to produce estimates for inclusion in the national accounts and the gross domestic product, they also serve as an important high-frequency indicator of the health of Canada's economy. Market reaction is limited.

Employment insurance claims

Source: Statistics Canada

Description: A monthly report of the number of beneficiaries, and of initial and renewal claims received. It is based on a count of persons who qualified for unemployment insurance benefits during the Labor Force Survey reference week, usually containing the 15th day of the month.

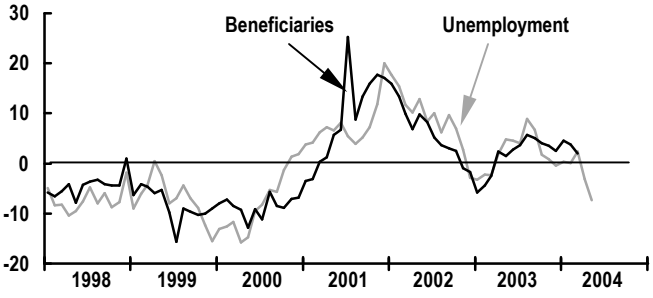
Timing: Usually on the last Tuesday of the second following month.

Seasonal/focus: Both seasonally adjusted and unadjusted data are available. Focus is on the number of new claims received and the changes.

Revisions: Data for both the current and previous months are subject to revisions.

Employment insurance beneficiaries and unemployment

%oya



J.P. Morgan Securities Canada, Toronto
Ted Carmichael (1-416) 981-9115
ted.carmichael@jpmorgan.com

Comments: Changes in the number of people receiving benefits and initial and renewal claims provide new information about the situation of the labor market, but are not timely. But even with the lag in release, the claims data are useful in confirming changes in the trend of employment and unemployment.

Private and public investment intentions

Source: Statistics Canada

Description: A semiannual survey of about 27,000 businesses, governments, and institutions twice a year, on their actual capital spending in the previous year and their spending intentions for the current year. Current dollar data are provided separately for construction and for machinery and equipment spending.

Timing: Released in February and July, based on surveys conducted in September-December and again in April-June.

Seasonal/focus: The business press focuses on total investment intentions. Analysts, however, focus on the business plant and equipment figures, which exclude residential and public investment.

Revisions: Revisions can be significant, as investment plans tend to change along with profit growth and the economic outlook. Revisions are reflected in National Accounts estimates, for which the survey acts as the benchmark. The revision pattern varies with the cycle, as firms tend to understate intentions in cyclical upswings and to overstate intentions heading into recessions.

Comments: The survey tends to draw little financial market reaction but is an important component of the GDP forecast and a gauge of business confidence in the economic outlook.

Housing starts

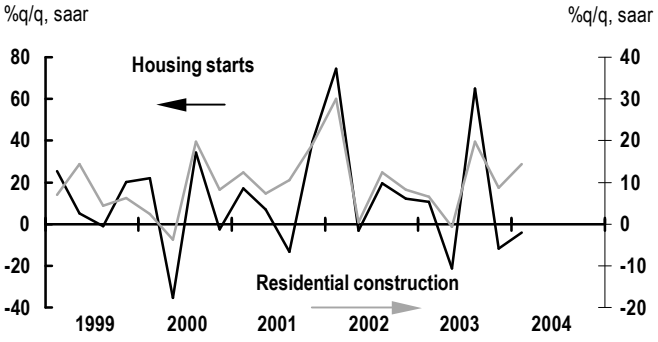
Source: Canada Mortgage and Housing Corporation

Description: A monthly report of unit housing starts, reported by region and type. For urban areas both single family and multiple unit dwelling starts are reported; for rural areas only total starts are reported. Multiple unit dwellings comprise semidetached and row housing plus apartments. Both publicly financed and privately owned housing are reported. Rural estimates are done only once each quarter.

Timing: Between the 1st and 10th of the following month.

Seasonal/focus: Raw and seasonally adjusted annualized rate reported for Canada and provinces. City data in raw format only. Focus is on the level of total starts in units at annual rates.

Housing starts and real residential construction



Revisions: Modest revision to preceding month's single and multiple-unit starts; quarterly revisions in the case of rural estimates.

Comments: Starts are reported in a timely manner and give a good indication of residential investment (which accounts for 5.4% of real GDP) as well as the impact of changes in mortgage rates on housing demand.

Building permits

Source: Statistics Canada

Description: A monthly survey of the value of planned residential and nonresidential construction activity in 2,350 municipalities representing 95% of the population. The communities representing the other 5% of the population are very small, and their levels of building activity have little impact on the total. The survey provides an early indication of building activity since the issuance of a building permit is one of the first steps in the construction process. The data are reported by province and territory and sub-categorized into commercial, industrial, and institutional.

Timing: 1st to 10th of second following month.

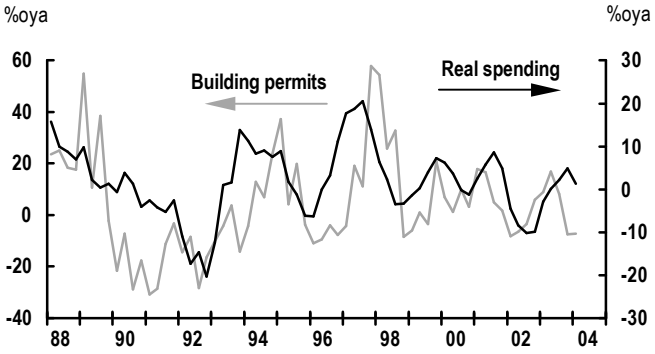
Seasonal/focus: Data are seasonally adjusted, with the focus on the monthly change.

Revisions: Preceding month's data are usually revised.

Comments: Data have limited financial market impact but provide information about business' intentions regarding investment which are useful in forecasting construction activity. Statistics on building permits are essential for the computation of residential capital expenditures and of net capital stock and depreciation. They are also a major input in the computation of the investment in nonresidential building construction.

J.P. Morgan Securities Canada, Toronto
Ted Carmichael (1-416) 981-9115
ted.carmichael@jpmorgan.com

Nonresidential construction



Investment in nonresidential building construction

Source: Statistics Canada

Description: This quarterly survey represents the value of spending by enterprises and governments for industrial, commercial, and institutional buildings. Nonresidential building construction excludes expenditure on residential construction and engineering work (bridges, roads, electrical dams, etc.). Investment in nonresidential building construction accounts for about 50% of the nonresidential structures in the business gross fixed capital formation part of the National Income and Expenditure Accounts.

Timing: Released around the 10th day of the month following the reference quarter.

Seasonal/focus: Data presented are seasonally adjusted.

Revisions: For the current year, estimates for previous quarters are revised. Each year, with the release of the first quarter, the estimates of the last four years are revised.

Comments: This relatively new report fills a void by providing more timely information on nonresidential construction that can be used for the quarterly GDP forecast.

International trade

Source: Statistics Canada

Description: A monthly report of the Canadian dollar value of merchandise exports, imports, and the trade balance, with a breakdown according to principal commodity groupings and trading partners. Aggregate data are on a balance of payment basis, while commodity detail is on a customs basis. Monthly price indices and constant dollar values are available for total exports and imports and for key commodity categories. Bilateral balances with the US, Japan, and European Union are provided monthly.

Timing: Between the 10th and the 20th of the second following month.

Seasonal/focus: Seasonally adjusted total exports and imports are provided in current and constant dollars. Focus is on the trade balance and monthly change in exports and imports.

Revisions: Data are revised each month of the current year to correct classification anomalies and include: late information. Customs basis data are revised for the previous data year each quarter. Factors influencing revisions include late receipt of import and export documentation, incorrect information on customs forms, replacement of estimates with actual figures (once available), changes in classification of merchandise based on more current information, and changes to seasonal adjustment factors.

Comments: The trade balance is the only part of the current account that is reported monthly. Volume data are useful for forecasting the net trade contribution to quarterly real GDP. Export and import price data are helpful in forecasting GDP deflator.

Current account

Source: Statistics Canada

Description: A quarterly report of the Canadian dollar value of international trade in goods, services and unrequited transfers. Canada enjoys a large merchandise trade surplus, but this is more than offset by an even larger deficit in services (invisibles) trade. Changes in the large investment income and travel account balances are especially important. The current account balance sheet records international trade in goods and services, and investment income includ-

Canadian exports and imports, 2003

% of nominal total

	Exports	Imports
Principal trading areas		
Total	100.0	100.0
United States	82.6	70.2
Japan	2.4	3.1
UK+other EEC	6.0	10.2
Other OECD	3.2	5.8
Other countries	5.8	10.8
Principal commodity groups		
Total	100.0	100.0
Agriculture and fishing	7.3	6.3
Energy	15.1	5.7
Forestry	8.6	0.9
Industrial goods and materials	16.6	19.1
Machinery and equipments	22.2	28.7
Automotive products	21.8	22.3
Others	4.3	13.5

J.P. Morgan Securities Canada, Toronto
Ted Carmichael (1-416) 981-9115
ted.carmichael@jpmorgan.com

ing interest, dividends, and profits earned by Canadian firms both at home and abroad, and Canada-based operations of foreign companies.

Timing: The day prior to the last business day of the second month following the quarter's end. Revised data provided with the next quarter's report.

Seasonal/focus: Data are provided in unadjusted and seasonally adjusted form. Market focus is on the seasonally adjusted level of the current account balance. Despite the current account surplus and falling net external debt position of recent years, the release of the current account seldom elicits a significant market response.

Revisions: Revisions are done quarterly for the current year and annually for four years.

Comments: The merchandise trade component can be accurately forecast from the monthly merchandise trade report. The travel component of the services balance can be proxied by monthly reports on overnight trips to Canada by nonresidents and outside the country by Canadians.

Consumer price index (CPI)

Source: Statistics Canada

Composition of the CPI

percentage weights

Overall index	100.00
Food	16.44
Shelter	28.40
Household operations	10.59
Clothing	5.44
Transportation	19.03
Health and personal care	4.45
Recreation and reading	11.84
Tobacco and alcohol	3.81
Memo: Energy items	7.14

Description: This monthly indicator of changes in consumer prices is obtained by comparing, through time, the cost of a fixed basket of commodities purchased by consumers. The CPI is weighted according to the relative importance of commodities in total consumer expenditures based on 2001 consumer expenditure data. The base year of the index is 1992 and is updated about every ten years. There are about 600 commodities specified to represent the price movement in 169 basic commodity classes. Data are available by province and for major cities.

Timing: Between the 10th and the 20th of the following month. Release time is 7:00 a.m., unlike most Canadian data which are released at 8:30 a.m.

Seasonal/focus: Attention is normally on the unadjusted monthly changes and on the year-on-year changes in headline and core inflation. The level of the unadjusted index is also used to calculate cost-of-living adjustments in labor agreements and government transfer payments and to calculate nominal interest payments to holders of Government of Canada real return bonds. Seasonally adjusted figures are provided for the total CPI.

Revisions: Each month, the previous month's seasonally adjusted index is subject to revision. On an annual basis, the seasonally adjusted values for the last three years are revised with the January data release. There are modest annual revisions in January to seasonal factors only.

Comments: Always an important release, the CPI report has taken on added significance since the Bank of Canada adopted inflation control targets in 1992. Unfortunately, the Bank's measure of core inflation, which excludes the eight most volatile items and the impact of indirect tax changes is not estimated by Statistics Canada and is therefore not part of the release. The core rate is calculated by the Bank of Canada and published on the Bank's website by around 7:30am on the release date.

Industrial product price index (IPPI)

Source: Statistics Canada

Composition of the IPPI

percentage weights

Overall index	100.00
Intermediate goods	60.14
First-stage	7.71
Second-stage	52.43
Finished goods	39.86
Foods and feeds	8.50
Capital equipment	11.73
Others	19.63

Description: This monthly index measures price changes for major commodities sold by manufacturers in Canada. The prices collected are for goods sold at the factory gate. As a result, the prices covered by the IPPI refer not to what a purchaser pays but to what the producer receives. They exclude all indirect taxes, such as sales taxes and tariffs. They also exclude any transportation service performed by a common carrier beyond the factory gate and any distribution services performed by the retail or wholesale trade industries. The current time base and weight base is 1997=100. Three sets of IPPI are produced. The first set is grouped by commodities, weighted by their value of production in 1997, and arranged according to the medium-level commodity groupings from the input-output tables. The second set covers the total commodity output of individual industries. These reflect the values of the output of commodities produced in each industry in 1997. The third set is grouped by their stage of processing. Because of the resource based nature of Canada's industrial production, intermediate goods have a much heavier weight (about 60%) in the index than in other industrial countries.

Timing: After the 20th of the following month.

Seasonal/focus: Not seasonally adjusted. Monthly and year-over-year changes in total are the focus. The core rate, ex-

J.P. Morgan Securities Canada, Toronto
Ted Carmichael (1-416) 981-9115
ted.carmichael@jpmorgan.com

cluding food and energy, is not published by Statistics Canada, but can be calculated for both the total and for finished goods.

Revisions: Each release of index numbers is subject to revision for six months. Exceptions to this rule are announced. However, revisions of the IPPI are for the most part, very small (the average revision being plus or minus 0.2%).

Comments: Since Canadian producers often quote prices in US dollars, fluctuations in the USD/CAD exchange rate have a direct impact on the IPPI. A 1% appreciation of the C$ is estimated to reduce the IPPI by 0.2%.

New housing price index

Source: Statistics Canada

Description: A monthly series that measures changes over time in the contractors' selling prices of new residential houses, where detailed specifications pertaining to each house remain the same between two consecutive periods. The sample consists of builders in 21 large census metropolitan areas who mainly build single unit houses in such volume or in such a fashion that they can report selling prices for comparable transactions. The survey also collects contractors' estimates of the current value (evaluated at market price) of the land. These estimates are independently indexed to provide the published series for land. The residual, (total selling price less land value), which mainly relates to the current cost of the structure, is also independently indexed and is presented as the estimated house price series. With the release of the May 2003 figures, Statistics Canada converted the time base of the indices to 1997=100.

Timing: Around the 10th of the second following month.

Seasonal/focus: Data are not seasonally adjusted. Focus is on the change over a year ago.

Revisions: The indices published are final.

Comments: The index is used to track price trends in the housing sector. Components of the series are used in the calculation of some elements of the Consumer Price Index. The Bank of Canada tracks the index as a gauge of new house prices along with other measures of existing house prices. Data can be compared with price changes for existing homes, available from the Canadian Real Estate Association.

Monetary aggregates

Source: Bank of Canada

Description: A monthly release covering the main aggregates: Gross M1, M1++ and M2++.

Timing: Third Friday of the following month.

Seasonal/focus: The main aggregates are provided in seasonally adjusted terms. Monthly changes can be volatile, so 6-month or 12-month changes are the analytical focus. Market focus is extremely limited since the Bank gave up targeting monetary aggregates in 1982. Nevertheless, the aggregates continue to be closely monitored by the Bank of Canada and sometimes do play a role in the setting of policy.

Revisions: Data are often revised back several months, but revisions are seldom large enough to alter the trend.

Comments: The BoC conducts ongoing research on the evolution of the monetary aggregates and publishes notes on the behavior of the monetary aggregates at regular intervals in the Bank of Canada *Review*. According to the Bank's economic research, growth of M1 provides useful information on the future level of production in the economy. It is the Bank's responsibility to ensure that the rate at which more money is introduced into the economy is consistent with long-term stable growth. The growth of the broader monetary aggregates, M2++, is a good leading indicator of the rate of inflation since it captures money held as a store of value.

The objective of the Bank of Canada's monetary policy is to support a level of spending by Canadians that is consistent with the Bank's goal of price stability. This is defined as keeping inflation within the inflation-control target range. By influencing the rate at which the supply of money and credit is growing, total spending on goods and services in the economy can be stabilized.

Monetary aggregates

Gross M1	=	Currency outside banks plus personal checking accounts plus current accounts plus adjustments to M1
M1++	=	M1+ plus noncheckable notice deposits held at chartered banks, trust and mortgage loan companies, and credit unions and caisses populaires less interbank noncheckable notice deposits plus continuity adjustments
M2++	=	M2+ plus Canada Savings Bonds plus cumulative net contributions to mutual funds other than Canadian dollar money market mutual funds (which are already included in M2+)

Banco J.P. Morgan, S.A., Mexico City
David Franco (52-55) 5540-9339
david.a.franco@jpmorgan.com

Mexico

The monthly data cycle

Same month	Following month	Second following month
Middle third	**First third**	**First third**
Consumer prices biweekly	Consumer confidence	Public sector report
business confidence	Consumer prices	Industrial production
Producer prices	Retail and wholesale sales	Labor report
Auto sector figures		Merchandise trade
Wage settlements		Employment IMSS
Indicator of overall economic activity		Monetary aggregates
Manufacturing indicators		Construction indicators
		Leading indicators
		Fixed investment

The quarterly data cycle

	Following month	Second following month
		Real GDP
		Real GDP by expenditures
		GDP deflator
		Nominal GDP
		Public-sector report
		Balance of payments

The weekly data cycle

Tuesday
International reserves
Monetary base

Banco J.P. Morgan, S.A., Mexico City
David Franco (52-55) 5540-9339
david.a.franco@jpmorgan.com

Gross domestic product

Source: Instituto Nacional de Estadística, Geografía e Informática (INEGI). (http://dgcnesyp.inegi.gob.mx/BDINE/A05/A0500007.HTM)

Description: A quarterly supply-side estimate of overall economic activity provided in both nominal and real Mexican pesos and expressed in annual terms. Both nominal and real measures are calculated as the aggregate value of nine economic activity categories following the methodology of the Mexican national accounts system (SNCN). The weight of each category is determined using its GDP proportion in 1993, the base year used in the real GDP estimate (updated recently from 1980). Nominal GDP is derived from the real estimate and inflated using price indices from Banxico, Pemex, CFE (the public electricity firm) , and the monthly survey of industrial activity, which are also presented along with the output data. Series for all nine divisions are available and also for nine subcategories within manufacturing activity. Historical series are available since 1980.

GDP composition in 2003

% of nominal total

Total GDP	100
Industry	25
manufacturing	18
construction	5
electricity, gas and water	2
mining	1
Commerce, restaurants and hotels	20
Social and personal services*	18
Financial services	16
Transport, communications	11
Agriculture, forestry, fishing	5
Net output taxes	8

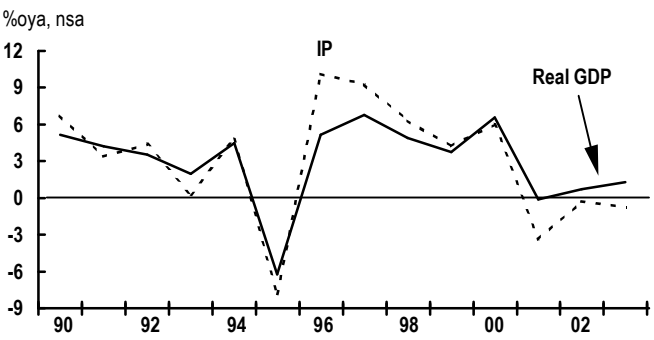
* includes services to goods-producing business, health care, education, recreation services, public administration, and defense.

Timing: Only a final estimate is released, approximately 42 to 45 days after the quarter's end.

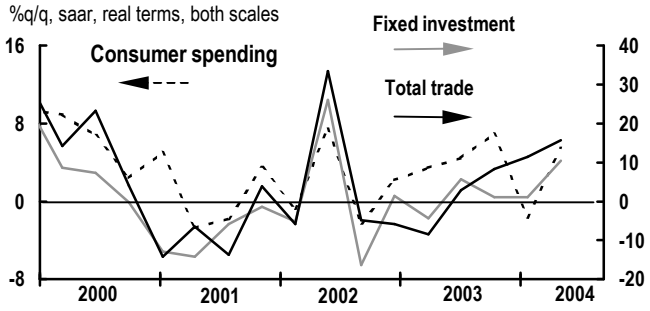
Seasonal/focus: The seasonally adjusted estimate is available for the total and three main sectors (IP, services and agriculture) and is released together with the raw data going back to 1980. The ARIMA X-12 methodology was recently introduced (replacing the Census X-11); this method is used in all seasonally adjusted series from Inegi.

Revisions: Minor, usually made at the time of the release of the final quarter of the year and going back 8 quarters. Seasonally adjusted figures are constantly revised, especially in years with a shifting Easter holiday.

Real GDP



GDP by type of expenditures



Comments: A press release is available with the publication of the series on the Inegi's web site with detailed information on sectorial activity. Real and nominal GDP broken down by state are available on an annual basis and going back to 1993, but with a 12- to 15-month lag. Market focus is mainly on the over-year-ago comparison, but attention recently has begun to be paid to the quarterly (seasonally adjusted) rate of change as well.

GDP by type of expenditure

Source: Instituto Nacional de Estadística, Geografía e Informática (INEGI). (http://dgcnesyp.inegi.gob.mx/BDINE/A05/A0500008.HTM)

Description: A comprehensive quarterly reading on demand-side economic activity. The series are offered in both real (1993 base year) and nominal calculations based on the supply-side GDP calculations and referenced to the national accounts system (SNCN). Historical data since 1980.

GDP composition in 2003

% of nominal total

Total GDP	100
Private consumption	72
services	38
nondurable goods	27
durable goods	7
Total imports	37
intermediate goods	28
capital goods	5
consumer goods	4
Total exports	34
manufacturing	29
oil and gas	4
Fixed investment	19
private	16
public	3
Public consumption	10
Change in inventories	1

Timing: Approximately 30 days following the release of the GDP report.

Seasonal/focus: Seasonally adjusted series are available for the headline categories with same history as the raw figures.

Revisions: Since the calculations are based on the supply-side GDP data, revisions to the expenditure figures are done in line with the latter.

Comments: The report has low market focus but is useful for assessing underlying economic trends.

Banco J.P. Morgan, S.A., Mexico City
David Franco (52-55) 5540-9339
david.a.franco@jpmorgan.com

Indicator of overall economic activity (IGAE)

Source: Instituto Nacional de Estadística, Geografía e Informática (INEGI). (http://dgcnesyp.inegi.gob.mx/BDINE/A05/A0500002.HTM)

Description: This output measure of GDP is the most comprehensive monthly indicator of economic activity. The calculation is based on the same SNCN methodology used in calculating the quarterly GDP estimate. The composite index (base-year 1993) comprises information from key economic sectors: industrial production, commerce, services (including financial, transport and communication, insurance, real estate, and health), and agriculture. The sectorial breakdown includes all four main components of industrial activity plus output from services and agriculture. Historical figures go back to 1993.

Timing: The press release with the indices is usually published on the 25th of the second following month.

Seasonal/focus: Seasonally adjusted data available only for the headline index.

Revisions: The preliminary nature of the information included in this indicator increases its underlying volatility, and so frequent (though small) revisions are common, mainly to the seasonally adjusted series.

Comments: The close correlation with quarterly GDP makes this a good leading indicator of economic trends.

Industrial production

Source: Instituto Nacional de Estadística, Geografía e Informática (INEGI). (http://dgcnesyp.inegi.gob.mx/BDINE/A05/A0500002.HTM)

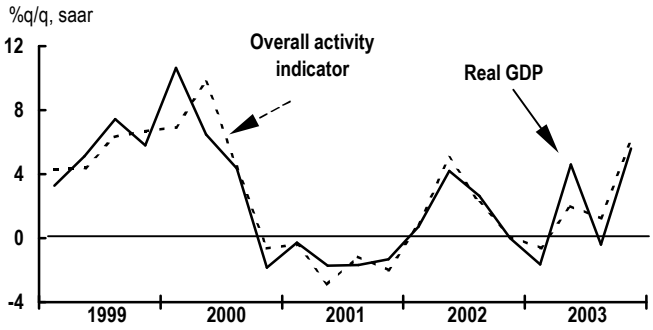
Description: This monthly indicator, also based on SNCN, provides a comprehensive estimate of industrial activity. Output volume indices (base year 1993) cover four main sectors: manufacturing, construction, utilities (electricity, gas, and water), and mining, each weighted to reflect the sector's share in 1993 real GDP. Production is measured at "basic" prices (excluding indirect taxes but reflecting subsidies), instead of producer prices as was done in the previous (base-year 1980) series. Estimates are derived from Inegi's monthly survey of industrial establishments and surveys from various public and private industrial chambers. The key manufacturing sector is divided into 9 categories, of which the most important (based on GDP contribution) are food, beverages, and tobacco (27%) and machinery, equipment, and metal products (25%).

IP composition in 1993

% of total

Industrial production	100
Manufacturing	71
Non*maquila*	58
Maquila	13
Construction	18
Electricity, gas, and water	6

Real GDP and overall economic activity indicator



Other subaggregations include final consumption goods (durable vs. nondurable), intermediate goods, capital goods, and output of the *maquila* sector (firms whose sales are entirely overseas, mainly as inputs for US industry).

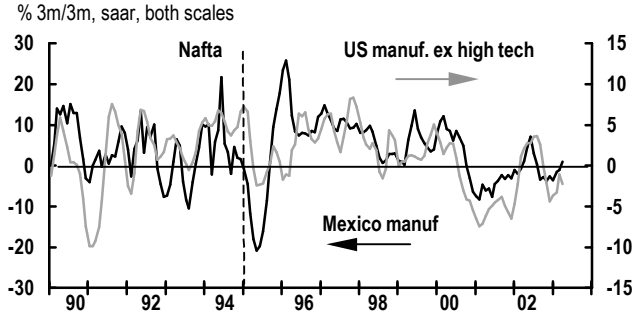
Timing: Usually 10 business days after the second following month.

Seasonal/focus: Seasonally adjusted series are provided for the total and the four main sectors

Revisions: Modest revisions in the seasonally adjusted series; larger when Easter holiday shifts between years.

Comments: IP is a good indicator of the cyclical state of the economy and useful for forecasting trends in overall economic activity. The close trade links between Mexico and the US (which have increased steadily since NAFTA) are concentrated in manufacturing (especially the maquila sector), which has a heavier weight in Mexico's GDP than in the US. Indeed, manufacturing IP correlates closely with US nontech manufacturing output and documents the progressive synchronization between Mexico's and US business cycles (chart). The base-year updating process involved comprehensive methodological changes; historical data go back to 1993.

Mexico and US manufacturing output



Banco J.P. Morgan, S.A., Mexico City
David Franco (52-55) 5540-9339
david.a.franco@jpmorgan.com

Manufacturing indicators

Source: Instituto Nacional de Estadística, Geografía e Informática (INEGI) (http://dgcnesyp.inegi.gob.mx/BDINE/C10/C10.HTM)

Description: This monthly industry survey covering 6600 establishments (or nearly 80% of gross manufacturing output) includes detailed information on nominal values and volume indices broken down in 209 classes of activity. The report incorporates sales values and labor data (including payrolls, hours worked, earnings) for all these classes.

Timing: Last days of the second following month.

Seasonal/focus: Seasonally adjusted data provided only for labor indices (payroll, hours worked, and real earnings). Low market attention because of the long publication lag.

Revisions: Frequent revisions to seasonally adjusted series.

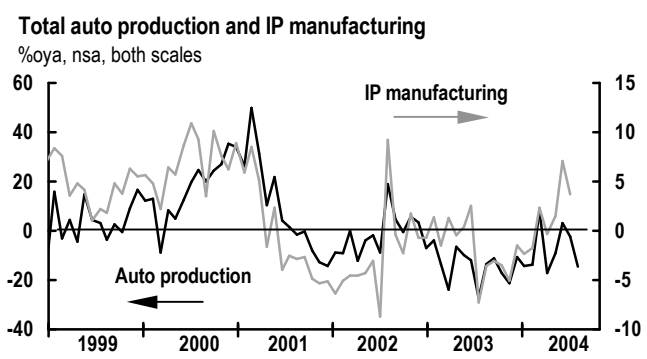
Comments: A separate report is offered for the important maquila subsector. Information is presented in absolute values on: the number of firms, payrolls, hours worked, earnings, value of domestic vs. imported inputs, other production expenses, and value added. Disaggregated data are provided by state and municipality and by type of manufactured product. Annual figures are also available, including a productivity index.

Automobile-sector report

Source: Mexican Automobile Industry Association (AMIA). (www.amia.com.mx/produc.htm)

Description: A monthly report covering affiliated auto industry firms—virtually all participants in the motor vehicle market, with detailed information on both output and sales. The aggregate report summarizes information on autos, light trucks, and trucks in six categories: retail sales, sales to dealers, export sales, and total production divided into domestic-market-oriented output and output sold abroad. The breakdown by producing firm is available (not with the press release) on the AMIA's web site.

Timing: Between the 10th and 15th of the following month.



Seasonal/focus: Only unadjusted data are provided. Market attention is on the annual rate of change. Historical data go back to January 1993.

Revisions: Minor.

Comments: The Mexican automobile sector, which has grown rapidly since NAFTA, contributes nearly 20% of manufacturing activity. With some three-fourths going as exports and largely sold in the US, total auto production is a timely leading indicator of manufacturing trends. Auto sales figures also are a timely leading indicator of consumer spending, especially for durable goods.

Construction indicators

Source: Instituto Nacional de Estadística, Geografía e Informática (INEGI). (http://dgcnesyp.inegi.gob.mx/BDINE/E10/E1000002.HTM)

Description: This monthly report provides a comprehensive reading on construction activity including both output and labor conditions. After several modifications since its first publication back in 1983, the current, broadened national survey gathers information from 3,750 construction firms including those affiliated with the National Construction Chamber (CNIC) and those not affiliated. Information is broken down by size of firm, in five classes according to volume of sales. Output data are in nominal terms separated by type of construction (buildings, productive facilities (water, electricity and communications, transport, oil, and others) and also by public or private sector. Estimates are provided on both orders and consumption of construction goods and plant capacity. Labor data include the number of workers (with breakdown by type of employee and labor contract) and earnings for each worker category.

Timing: last days of the second following month.

Seasonal/focus: Recent improvements in methodology and the survey's expanded poll universe mean that the history is brief (going back to January of 2000), making seasonal adjustment difficult.

Revisions: Minor.

Comments: A good comprehensive monthly indicator of construction activity that gets little market attention.

Business confidence index

Source: central bank (Banxico) (www.banxico.org.mx/eInfoFinanciera/FSinfoFinanciera.html)

Description: This monthly survey is the main compilation of market consensus forecasts for the key macroeconomic and financial variables. The business confidence index (one of the twenty questions asked) refers to the net percentage balance of financial market analysts expecting improving over-

Banco J.P. Morgan, S.A., Mexico City
David Franco (52-55) 5540-9339
david.a.franco@jpmorgan.com

all conditions, minus those anticipating deterioration, over a six-month horizon. A neutral reading is set at zero.

Timing: Last days of the reference month.

Seasonal/focus: The index is presented without seasonal adjustment. Market focus is relatively low.

Revisions: None.

Comments: The composite index has a relatively good correlation with trends in overall activity and industrial production, and has some value as a leading indicator of business conditions. But coverage is limited to around 30 participants, including the main analysts in the financial market. Business firms are not included in the poll.

Fixed investment

Source: Instituto Nacional de Estadística, Geografía e Informática (INEGI). (http://dgcnesyp.inegi.gob.mx/BDINE/A05/A0500006.HTM)

Description: This monthly survey reports the gross value of fixed assets (those used repeatedly in the production process for more than one year), both tangible and intangible, including repairs and additions. The main two component subindices (base year 1993) measure the real value of capital goods within construction activity, and machinery and equipment. The later also includes breakdown into domestically produced (only new assets) and imported (including new and used goods) equipment. The total (composite) index is calculated as the aggregate value of the two components.

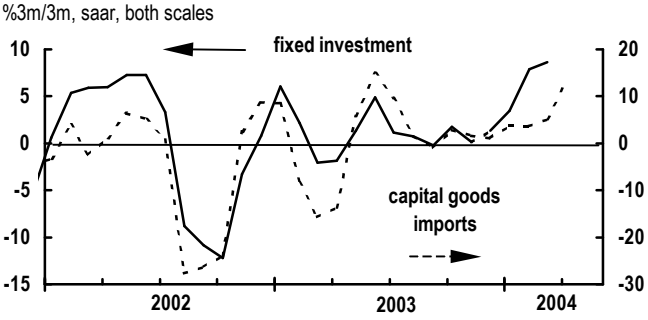
Timing: Around the fifth business day of the third following month

Seasonal/focus: Seasonally adjusted data provided for the two component subindices. Focus is on the monthly changes. Market attention is low.

Revisions: Frequent, to the seasonally adjusted data.

Comments: A good barometer (not very timely though) of general business cycle conditions. The import component in the investment flow has a larger weight.

Fixed investment and capital goods imports



Leading indicators

Source: Instituto Nacional de Estadística, Geografía e Informática (INEGI). (http://dgcnesyp.inegi.gob.mx/BDINE/A05/A0500003.HTM)

Description: Comprises two composite monthly indices: coincident and advanced. Both are expressed in real terms (base year 1993). The coincident indicator summarizes information from goods and service producing sectors and on labor markets (specifically: the IGAE, IP, IMSS employment, retail sales, maquila earnings, and underemployment rate). While backward-looking because of the time lags, it helps to assess current trends in economic activity. The advanced index uses more forward-looking, high frequency time series from the financial and real sectors of the economy (the real exchange rate, Mexican oil price, stock prices, interbank interest rate, hours worked in manufacturing, and construction output) to anticipate short-term swings in economic activity. Historical data go back to 1980.

Timing: First week of the third following month

Seasonal/focus: Both indices presented in seasonally adjusted terms only, with focus on the monthly changes.

Revisions: Substantial for both indices as the source data are subject to revision.

Comments: Because of the long publication lag, market attention is quite poor.

Retail and wholesale sales

Source: Instituto Nacional de Estadística, Geografía e Informática (INEGI). (http://dgcnesyp.inegi.gob.mx/BDINE/F10/F10.HTM)

Description: This monthly survey is the main measure of consumer spending, and constitutes about 22% of GDP. The survey started in 1983 and estimates commercial activity at both retail and wholesale level in the largest 33 cities in Mexico. The sales indices cover around 50% of commercial establishments that are surveyed in the broad economic census conducted every 5 years. Net retail and wholesale sales are reported in real terms (merchandise sold net of returns and discounts and excluding VAT tax). Net purchases (merchandise bought by the establishments net of discounts and excluding VAT taxes) are also reported in real terms by main city and type of activity. Payrolls and real earnings are also reported, as are detailed breakdowns (for each of the above categories) by city. There are 12 categories of retail store sales and 18 categories of wholesale business reported. Specific weights for each activity are based on the 1994 economic activity census (conducted every 10 years). Sales indices are deflated using the central bank's CPI indices appropriate for each subdivision.

Banco J.P. Morgan, S.A., Mexico City
David Franco (52-55) 5540-9339
david.a.franco@jpmorgan.com

Timing: Around the 20th of the second following month.

Seasonal/focus: Seasonally adjusted series are provided for total sales, payrolls, and average real earnings for both retail and wholesale businesses. Market attention is generally high with focus on the over-year-ago comparisons.

Revisions: Frequent revisions to seasonally adjusted data.

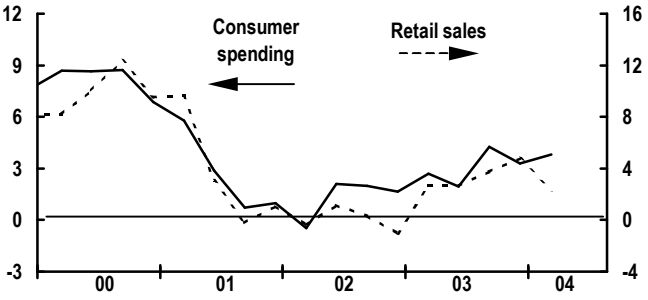
Comments: The estimated real value of retail sales provides a key reading on commercial activity and a very useful leading indicator of the broad consumer spending estimate in GDP. An alternative measure for gauging private consumption is offered by the National Retailers Association of Mexico (ANTAD). This report summarizes activity at 99 store chains, of which 46 comprise self-service establishments (supermarkets), 18 department stores, and 35 specialized establishments, for a total 6419 stores. Information consists of the over-year-ago change in total sales (in real terms) and for each of the three types of store; a breakdown by type of merchandise is also available. No seasonally adjusted figures are reported.

Consumer confidence index

Source: Instituto Nacional de Estadística, Geografía e Informática (INEGI) and Central Bank (Banxico) (http://dgcnesyp.inegi.gob.mx/BDINE/A05/A0500001.HTM)

Description: This recently created index measures consumer confidence through five components, assessing households' perception of present and future overall economic conditions (at both the personal and economywide level) and about buying intentions for durable goods. The monthly survey covers 2,336 households nationwide. The expectation component reflects questions about broad economic conditions over a 12-month horizon. The five components are combined into an aggregate composite index (January 2003=100), with a neutral value of 50. Each partial index is calculated as the weighted average of households' answers, which are measured on a 1-to-5 scale. The aggregate (general) index is the simple average of the five subindices. Historical data go back to January 2002.

Private consumption and retail sales
%3m/3m, saar, 1yr-ma, both scales



Timing: First week of the following month

Seasonal/focus: Not seasonally adjusted given its short history. Market focus is low now, but attention is likely to grow over time, with focus on monthly changes.

Revisions: Minor

Comments: Another measure of consumer confidence is the one prepared by the Reforma newspaper and first published in October 2000. This diffusion index is calculated by aggregating responses to qualitative questions on specific aspects of economic activity, including employment, income, quality of life, credit costs, and inflation. It does not include an expectation component. Despite their recent history, both consumer sentiment indices correlate well with household spending and are likely to become a useful tool in forecasting household spending patterns.

Labor market report

Source: Instituto Nacional de Estadística, Geografía e Informática (INEGI) (http://dgcnesyp.inegi.gob.mx/BDINE/I10/I10.HTM)

Description: This is a broad monthly survey of labor market conditions, coverings the largest 32 urban areas nationwide. The available estimates are based on the last population census (carried out every 10 years) dating from 2000 and provide a wide range of information on the social and demographic characteristics of the urban population. These focus on the occupational structure and distribution by economic sector of the labor force. The report shows employed persons by income level, by type of labor contract, and by number of hours worked; and also reports on those workers in search of a new job and those with more than one job. The main indicator is the open unemployment rate, defined as the percent of the labor force (population over 12 years of age performing any type of paid job or searching for one in the two months prior to the survey week) working less than one hour during the survey week but searching for a job or trying self-employed activity. Unemployed workers are also broken down by type of activity, length of inactivity, education level, household status, and decisions to quit the last job. Other key concepts include the underemployment rate (workers working less than 35 hours a week), critical condition occupation rate (includes all those underemployed plus those with monthly

Labor force by main activity*
% of occupied labor force

Total labor forces	100.00
Services	38.0
Commerce	21.4
Manufacturing	20.2
Transport , communications	6.5
Construction	6.0
Government	5.7
Mining and electricity	0.9
Agriculture	0.8
in the US †	0.5

* Average of January-May 2003 † Mexican residents working in the US.

Banco J.P. Morgan, S.A., Mexico City
David Franco (52-55) 5540-9339
david.a.franco@jpmorgan.com

salaries under the minimum monthly wage or working more than 48 hours and receiving less than twice the minimum wages), and the alternative rate (open unemployment plus available workers not in the labor force and workers expecting to start a job in the 4 weeks following the survey week). Available data for the employed portion of the urban population are broken down by sector of economic activity, main occupation, type of labor contract, income level, benefits, weekly hours worked, and number or workers within the firm. Generally, all raw indicators in the labor report are presented by urban locality and sex. Historical data are available since 1987 for the main rates, and since 1995 for the complementary information.

Timing: Around the 20th of the month following.

Seasonal/focus: Major indices are seasonally adjusted. Focus is on the headline unemployment rate. Market attention is relatively low.

Revisions: Minor, mostly to the seasonally adjusted series.

Comments: The Mexican labor force is 55% of the total population over 12 years of age (estimated at 97.5 million in the 2000 census); 74% for males and 38% for females. As in most countries, changes in employment lag the business cycle and their timing is difficult to forecast. The comprehensive data in the labor report are not generally an efficient leading indicator of cyclical employment trends, given the narrow definitions applied. But its broad nationwide coverage makes the survey a relatively good reference for general labor market conditions. The volatility in moth-to-month changes makes smoothed comparisons (3-month moving averages or changes over the last 3 moths) more suitable for business cycle analysis.

Formal sector (IMSS) employment and unemployment rate

Employment IMSS

Source: Mexican institute of social security (IMSS) (www.imss.gob.mx)

Description: A very important monthly report gauging employment in the formal sector of the economy. Data describe the number of workers insured at the Social Security Institute, for whom firms pay legal benefits. Breakdown is offered by state and main economic activity including permanent or temporary types of workers.

Timing: Around the 25th of the following month

Seasonal/focus: Only unadjusted figures available. Market attention is high with focus on the monthly change in insured workers.

Revisions: Minor

Comments: The report provides the most timely indication of formal employment payrolls and provides a good deal of sectorial information. In general, it is a reliable leading indicator of employment trends. Formal sector workers summed 15.8 million at the end of 2003, 90% of which were permanent workers. Of these, 25% were in the broad service sector, 23% in manufacturing, 22% in the "other" category (mainly students), 6% in construction, and the remainder in other specified sectors.

Wage settlements

Source: Ministry of labor (STPS) (www.stps.gob.mx/index2.htm)

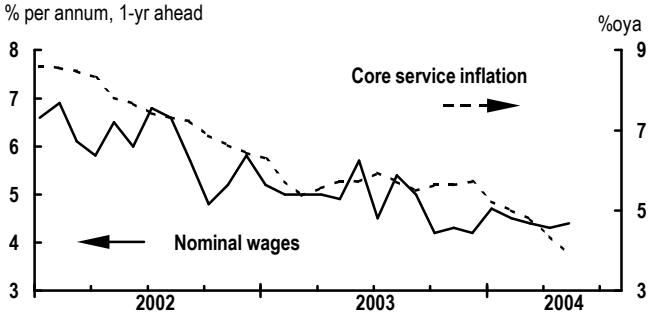
Description: This monthly figure refers to the wage negotiations at both public and private firms under federal jurisdiction. The data provide the one-year-ahead average increase in nominal base salary, weighted by the number of workers affected. The figures are broken down by state and main economic activity sector and include the number of workers involved and the number of negotiations. Coverage is large and includes the most representative firms in the economy.

Timing: Around the 12th of the following month

Seasonal/focus: Only unadjusted figures available. Market attention has much increased recently given the inflationary impact of labor income pressures.

Revisions: Minor

Wage settlements and core (non-housing) service inflation



Comments: Since inflation pressures in recent years have originated from higher labor income, as confirmed by the

Banco J.P. Morgan, S.A., Mexico City
David Franco (52-55) 5540-9339
david.a.franco@jpmorgan.com

wage-sensitive core services (ex-housing) price index, this indicator offers a good assessment of future labor inflation pressures. The trend in wage negotiations is closely monitored by the central bank and usually cited as a key variable in the monetary policy decisions, owing to the importance of their impact in market inflation expectations.

Balance of payments

Source: Ministry of finance (SHCP), central bank (Banxico) and INEGI (http://www.banxico.org.mx/eInfoFinanciera/FSinfoFinanciera.html)

Description: This comprehensive quarterly report provides US dollar-denominated data on the current account including merchandise trade, transfers, and services. The last category is broken down into tourism and all other services (including business, professional and technical, insurance, and financial). The capital account details asset transactions with foreign residents. Liabilities are divided into loans and bank deposits, broken down by issuer, and foreign investment, broken down into FDI and portfolio investment. This last distinguishes between capital or money market flows and assets issued abroad, which in turn incorporate public and private categories. The claims side of the capital balance includes Mexican assets abroad by main type (FDI, in banks, loans, and external debt guarantees).

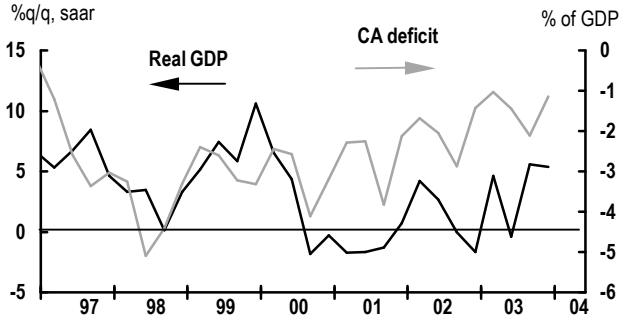
Timing: The last week of the second month following the end of the quarter.

Seasonal/focus: Only unadjusted data are available.

Revisions: Frequent but not significant.

Comments: The ongoing convergence between Mexico and the US economies, playing out in both real and financial sectors, has been reflected in stable development of the external accounts despite recent external shocks. Indeed, capital inflows have remained relatively strong during times of tighter global financial conditions and subpar growth. High-frequency data on the central bank's reserves are available in the weekly balance sheet report.

Real GDP growth and current account deficit



Merchandise trade balance

Source: Ministry of finance (SHCP), ministry of economy (SE), central bank (Banxico) and INEGI (http://dgcnesyp.inegi.gob.mx/BDINE/J10/J10.HTM)

Description: This comprehensive monthly trade report reports data out of the 46 customs offices nationwide (averaging 1.20 million daily transactions). It is organized according to IMF guidelines and presented in US dollar terms. Both exports and imports are counted on an f.o.b. basis and classified according to ISIC categories: agriculture, livestock and fishing, oil and mining, manufacturing, and other products. Further product breakdown is available for each category. Exports, data include detailed (value and volume) figures for the oil and gas sector. Manufactured exports are broken down into 9 classes (the same as IP) and also into *maquila* and non*maquila*. Exports and imports are also presented by end use (consumer, intermediate, and capital goods). A tourism balance is also available including the number of travelers, and value of income and expenditures associated with tourism activities. The trade package also includes trade balances (f.o.b.-f.o.b.) by region and country.

Timing: Preliminary figures are released around the 23rd of the following month including most details. A revised version follows and is generally published 15 days after.

Seasonal/focus: All breakdown of exports and imports goods are released on a seasonally adjusted basis. Market attention is considerable with focus on the headline balance.

Revisions: The revised report usually changes little in relation to the preliminary one. Larger revisions are done to the two seasonally adjusted series.

Comments: Mexico's strategy of active trade opening (the cornerstone being NAFTA back in 1994) has progressively reduced the importance of oil trade in the external balances, putting manufacturing in the driver's seat. Today, manufactures account for nearly 90% of total exports; and 85% of manufactured exports are sold in the US. This tight trade link is largely concentrated in electronic appliances and parts and the auto sector. In the case of imports, manufactured goods make up 95% of total import demand.

Consumer price index

Source: Central bank (Banxico) (www.banxico.org.mx/eInfoFinanciera/FSinfoFinanciera.html)

Description: Since it was first published in 1969, the consumer price index (INPC) has gone through several amendments. The last version (base period June 02H2) introduces new basket weights, based on the Inegi's national survey of household income and spending (2000). Compared to the previous index (base year 1994), it assigns a lower weight

Banco J.P. Morgan, S.A., Mexico City
David Franco (52-55) 5540-9339
david.a.franco@jpmorgan.com

to food and clothing, and higher weights to the housing, health, and education categories—changes that reflect a decline in average household size, greater urbanization, and better income distribution. The index also includes 36 new goods and services: most significantly, PCs, property taxes, satellite and cable TV, Internet service, and bottled water. Prices of nearly 170,000 specific inputs (grouped in 313 generic categories) are surveyed in the largest 46 cities nationwide for the general index. This also includes a breakdown into seven regions and four household income levels. The core index tracks prices in those generic concepts with lower historic volatility and thus provides a good reading of underlying inflation pressures, largely influenced by the exchange rate and wages. The most volatile generics are in three categories: agriculture and livestock, education, and goods and services whose prices are publicly administered (gasoline, electricity, and domestic gas) or negotiated (transport, telephone, and other licenses). All CPI indices are presented in both monthly and biweekly formats.

Composition of the CPI

	Categories	% of total
Total	313	100
Core:	234	67
goods	205	37
services	29	30
Public:	17	16
administered	3	6
negotiated	14	10
Agriculture	56	13
fresh food†	36	4
Education	6	4

*† Includes fruits and vegetables.

Timing: The monthly CPI report is released on the 10th day of the following month (or earlier business day): and the biweekly report for the first half of the month is available on the 25th (or earlier business day) of the same month.

Seasonal/focus: No seasonally adjusted indices available. Market attention is very high.

Revisions: None.

Comments: Mexico's CPI inflation tumbled from 52%oya following the 1995 banking crisis to slightly under 4% in 2003. The change reflects sound macro (especially monetary) policies, the fx float, consistent public-price policies, and downward wage flexibility. Banxico's inflation targeting approach to monetary policy involves daily reserve adjustments based on the headline CPI inflation rate, and accounts for the market's keen attention to the CPI report.

Producer price index

Source: Central bank (Banxico)

Description: A group of monthly production indices calculated independently for each of the two subcategories of goods and services in which the national output is broken down, that is final and intermediate inputs. The calculation is based on 11,500 quotes from more than 2000 firms nationwide, in which the different components are grouped under 626 generic categories. The weight structure in the index is based on the production values from 2001, the same year used for estimating the GDP weights in the national accounts. For each of the two main categories of goods and services (final and intermediate) the family of subindices (base year 2003) is broken down by the demand and supply side. Each of these is subdivided into oil and non-oil products and services and also into the main sectors of economic activity.

Composition of the PPI

	Final goods	Intermediate goods
Total	100	100
Agriculture	4	12
Mining	2	4
Manufacturing	30	42
Construction	11	0
Electricity and gas	1	3
Commerce	20	9
Transport, communications	9	9
Real estate services	8	6
Other services†	6	4

† Includes personal, social and communal.

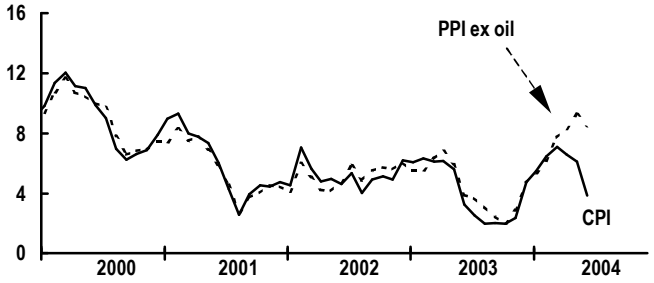
Timing: Released together with the CPI report on the 10th (or earlier business day) of the following month.

Seasonal/focus: No seasonally adjusted indices available.

Revisions: The previous two months' data are subject to frequent but not major revision.

Consumer and producer price inflation

% change over 6 months, annualized rate



Comments: The new family of PPI indices made its debut recently as the central bank introduced its latest version including a change in base year and a new weights. The key changes in the final goods index were: a higher weight for machinery and equipment output, and lower weight for agriculture and oil-related output (a result of NAFTA). For intermediate inputs, the key changes were a lower weight for agricultural materials, in favor of metallic inputs and communications services. Also included in the central bank's portfolio of price indices are the export and import price (US dollar base) indices. The former is a weighted average of 50 generic products (largely manufactures) based on international quotes of main exports and US import prices, and the latter is a weighted average of 150 generic products provided by unit prices of exporting countries and US export prices. Another price index is the construction cost in-

Banco J.P. Morgan, S.A., Mexico City
David Franco (52-55) 5540-9339
david.a.franco@jpmorgan.com

dex for low-income public housing, based on 2800 quotes in the 23 largest cities including 32 construction materials and 12 labor-related costs.

Monetary aggregates report

Source: Central bank (Banxico)

Description: This monthly report includes detailed information on money aggregates classified according to international standards. M1 includes checking accounts (in domestic and foreign currencies) in addition to deposits and high-powered money. M2 is M1 plus residents' savings in the form of other banking fund-raising, government debt, private debt, and pension funds. M3 is M2 plus nonresidents' savings (government debt and banking fundraising). In addition to this, savings (of Mexican residents and nonresident) held at Mexican banks abroad are added into M4. This last is also broken down into domestic and foreign-currency denominated money. A monetary aggregates classification including public sector savings is also provided (labeled with a letter *a*). The other key information on the report relates to monthly banking credit, broken down by type of user (private sector, states and municipalities, and national public sector). Banking lending to the private sector is detailed as consumer, mortgage, and business loans. A quarterly report is also available with a broad measure of total credit activity. Loans are broken down into foreign and domestic credit. This last details flows from bank, non bank, debt issuance, and development banks.

Timing: The 25th (or following business day) of the month following.

Seasonal/focus: All material is presented seasonally unadjusted; market focus is low.

Revisions: Minor revisions, usually to the previous month.

Comments: Mexico's financial system has undergone significant structural and regulatory changes since the 1995 banking crisis. Despite these efforts, financial intermediation remains a relatively low share of GDP compared to other regional economies (mainly Brazil and Chile). After a prolonged setback (going back to the 1995 crisis). Total credit has showed improving signs despite the weaker performance in bank loans. This last is showing signs of reawakening, supported by the easier financial conditions over the last 2 years as interest rates hit historical lows. Most of the growth is in consumer lines, followed by credit to firms and mortgage lending.

Public-sector report

Source: Central bank (Banxico) (www.shcp.gob.mx/index01.html)

Description: This monthly report offers considerable detail on public sector activities. The headline and primary fiscal balances, revenue, and expenditure are all available for each definition of government: public sector, federal government, public enterprises, and social security. The broad budgetary data on public sector revenues are broken down by oil and non-oil income, and into tax and nontax income. Tax collection categories include income, VAT, excise, import, luxury, and other taxes. Public sector expenditures are subdivided into current items, capital items, financial costs, and transfers to states and municipalities, federal government, public firms, secretariats, legislative and judicial authorities, and public security. The report includes detailed information on the public sector's external and domestic debt, broken down by financing sources, tenor, and type of debt instrument. The ministry of finance also prepares a quarterly report including all information in the monthly series and a comprehensive text explaining the fiscal performance.

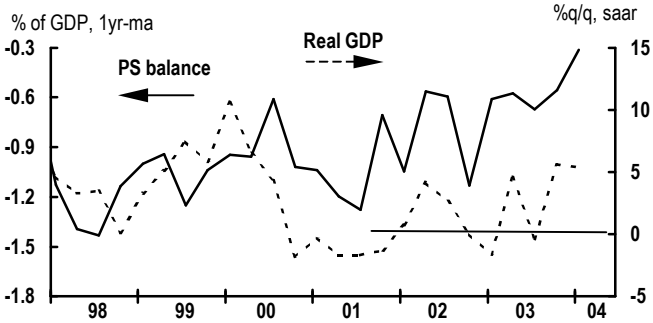
Timing: First days of the second following month.

Seasonal/focus: No seasonally adjusted data are available. Focus is relatively significant.

Revisions: Frequent but minor revisions to previous months.

Comments: Mexico's improved fiscal discipline has shielded the economy from recent financial shocks and encouraged financial convergence with the US. Interest rates have fallen to historical lows and active debt management has boosted the country's creditworthiness. The pending fiscal reform, which aims at rationalizing the VAT tax burden, should further reduce Mexico's dependance on oil (still 30% of total public sector revenues). This in turn may allow the government's to run countercyclical policies to offset the economic impact of external shocks.

Public sector economic balance and real GDP



JPMorgan Chase Bank, Sao Paulo
Fabio Akira Hashizume (55-11) 3048-3634
Fabio.Akira@JPMorgan.com

Brazil

The monthly data cycle

Same month	Following month	Second following month
First third	**First third**	**First third**
	Merchandise trade	Industrial production
	IGP-DI	
Middle third	**Middle third**	**Middle third**
IGP-10	Unemployment rate	
	National CPI (IPCA)	
	National CPI (INPC)	
	CPI FIPE - close monthly	
Final third	**Final third**	**Final third**
General price index	Retail sales	
IGP-M	Industrial wages	
	Balance of payments	
	Monetary aggregates	
	Public sector finances	

The quarterly data cycle

	Following month	Second following month
		GDP

The weekly data cycle

CPI FIPE
Trade balance

The daily data cycle

International reserves

JPMorgan Chase Bank, Sao Paulo
Fabio Akira Hashizume (55-11) 3048-3634
Fabio.Akira@JPMorgan.com

Gross domestic product

Source: national statistics agency (IBGE)

Description: Quarterly indices (1980=100) of production-based GDP broken down into 12 economic sectors at constant prices. The GDP series on an expenditure basis is published in the same report. The nominal GDP (in R$) is released as well with a narrower breakdown compared to the index.

Timing: The index is published about 60 days after the end of the quarter and the nominal GDP is released after 30 days of the release of the index.

Seasonal/focus: Seasonal adjustments are available for both production-based and expenditure-based GDP. Focus is on the evolution of the expenditure side, specially domestic absorption and external demand.

Revisions: The last eight quarters data are generally revised, specially for the seasonal adjustments. For annual data, the last three years usually experience revisions.

Comments: Annual data are more complete regarding the breakdown by sector, but given the time delay focus is on the quarterly data.

Industrial production

Source: national statistics agency (IBGE)

Description: A monthly index of national industrial output covering 6,200 companies and 944 products. The manufacturing breakdown comprises 19 different industries and also end-use categories such as capital, intermediate, and consumer goods.

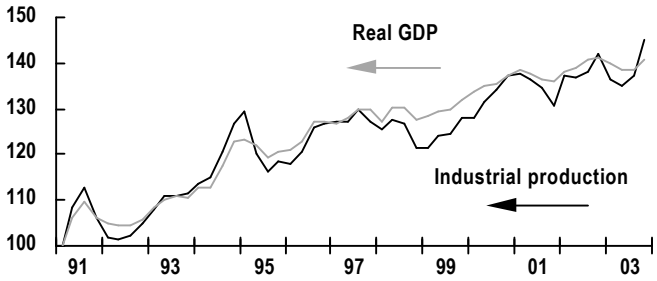
Timing: Released with a lag of about 42 days.

Seasonal/focus: Seasonal adjustment is provided.

Revisions: The last twelve months are usually revised, with the largest revisions in the latest three months' data.

Real GDP and industrial production

Index 91Q1=100, sa



Comments: Used as a high-frequency GDP proxy. There are other industrial activity indicators provided by FIESP (only for Sao Paulo) and CNI (nationwide), but these are less representative compared to the IBGE numbers.

Retail sales

Source: National Statistics Agency (IBGE)

Description: A monthly index (2003=100) of retail sales volume from a national survey of 5000 retail firms with 20 or more employees. Data represent monthly gross revenues, deflated by IPCA inflation. Breakdown by type of commerce and by region is provided.

Timing: Usually released with a delay of 45 days.

Seasonal/focus: Seasonal adjustment is provided.

Revisions: The last twelve months' data are subject to revisions.

Comments: This is the only nationwide retail sales indicator and is used to compose the service sector of the GDP. A more timely proxy for retail activity is checking activity in Sao Paulo, which is released on a weekly basis.

Unemployment rate

Source: national statistics agency (IBGE)

Description: The unemployment rate is part of the monthly labor report based on a survey of 37,000 households in six major metropolitan areas (Belo Horizonte, Porto Alegre, Recife, Rio de Janeiro, Salvador, and São Paulo). An individual is considered unemployed and part of the labor force if he or she has been looking for work in the 30 days preceding the survey. The survey began in 1980, but a new methodology (which is not compatible with the old data) was launched in October 2001.

Timing: Released on second Tuesday of following month.

Seasonal/focus: Not seasonally adjusted.

Revisions: Occasional.

Comments: The components of the labor report (labor force, number of employees, etc) are released. Income indicators, average real income, are provided as well.

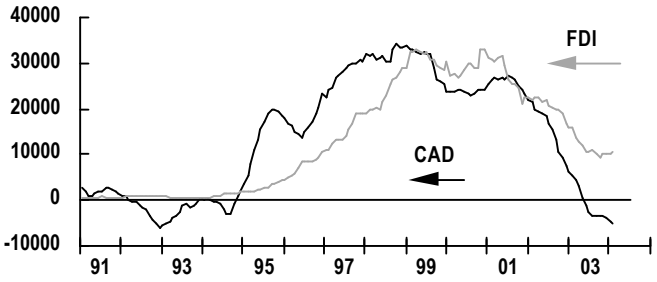
Merchandise trade

Source: Ministry of Development, Industry, and Commerce (MDIC)

JPMorgan Chase Bank, Sao Paulo
Fabio Akira Hashizume (55-11) 3048-3634
Fabio.Akira@JPMorgan.com

Current account deficit and FDI

12-months trailing, US$ million



Description: A monthly report of exports and imports of goods (both f.o.b.) based on customs clearances, reported in US dollars. Breakdown by product and origin/destination are provided, as well as import and export prices.

Timing: Usually released on the first business day of the following month. Weekly totals are available the first business day of the following week.

Seasonal/focus: Not seasonally adjusted.

Revisions: None.

Comments: Closely followed by the market for its relevant to fx flows and, consequently, the exchange rate.

Balance of payments

Source: central bank of Brazil (BCB)

Description: A monthly report of international current and capital transactions in US dollars, compiled in accordance with the IMF Balance of Payment Manuals.

Timing: Released at the end of following month.

Seasonal/focus: Not seasonally adjusted. Focus is on the current account balance and FDI inflows in US dollars and as a percent of GDP.

Revisions: Frequent, but small.

Comments: Part of the balance of payments performance is anticipated by the more timely release of the trade balance, but information on the rest of the current account and the capital movements help to gauge external vulnerabilities. The central bank usually publishes official forecasts of uses and sources of the balance of payments for the current year.

International reserves

Source: Central Bank of Brazil (BCB)

Description: A daily report of the central bank's foreign assets, based on two concepts: net reserves (excluding use of IMF resources) and gross reserves (total assets only). The details of reserve composition are available only in the monthly report released with the balance of payments.

Timing: Daily with a two-day delay.

Seasonal/focus: Not seasonally adjusted.

Revisions: None.

Comments: An indicator of the country's ability to service external obligations and support a given exchange rate. Reserves equivalent to at least three months of imports of goods and services are considered adequate by Brazilian monetary authorities.

Consumer price index: São Paulo (IPC-FIPE)

Source: FIPE- São Paulo University Economic Research Institute

Description: A weekly release reflecting the four-week moving average of retail prices in the city of São Paulo, based on consumption patterns of households with incomes equivalent to between 2 and 20 times the minimum wage.

Timing: Published weekly, around three days after the end of the price collection period.

Seasonal/focus: Not seasonally adjusted. Focus is on month-over-month change in the four-week average.

Revisions: None.

Comments: Although constrained to São Paulo, the weekly frequency makes this index closely watched by markets.

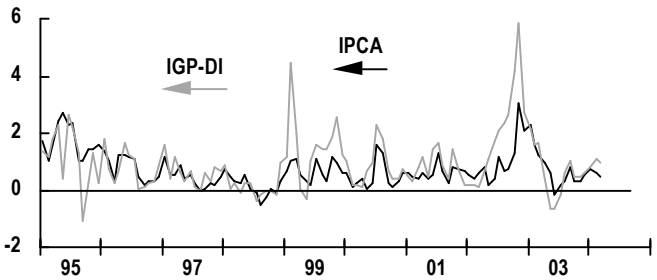
National consumer price index (IPCA)

Source: national statistics agency (IBGE)

Description: Monthly indices (1991=100) are compiled from a weighted average of 11 regional consumer price indices, based on consumption patterns of households with incomes

IPCA and IGP-DI inflation

% m/m, nsa



JPMorgan Chase Bank, Sao Paulo
Fabio Akira Hashizume (55-11) 3048-3634
Fabio.Akira@JPMorgan.com

between 1 and 40 times the minimum wage. Price collection spans the 1st through the 30th of the reference month.

Timing: Usually released in second week of the following month.

Seasonal/focus: Not seasonally adjusted. Focus is on headline and core measures. A trimmed mean (excluding high and low outliers) excluding food and administered prices is the main measure followed by the market and the monetary authority.

Revisions: None.

Comments: This is the official inflation index targeted by the central bank. A preview with the same methodology is also released (IPCA-15); it is calculated for the 30 days ended in the middle of the reference month.

General price index (IGP-10 / IGP-M / IGP-DI)

Source: Getúlio Vargas foundation (FGV)

Description: A nationwide monthly composite index (1989=100) of wholesale prices, consumer prices (based on the consumption pattern of households with income between 1 and 33 times the minimum wage), and construction costs. Price indices are published both for the headline and these main components. The weights of these components in the headline are: wholesale prices, 60%; consumer prices, 30%; construction costs, 10%. The IGP-DI is based on the whole month inflation, but two previews were created (IGP-10 and IGP-M). IGP-M is based on prices collected over a period from the 21st day of the previous month through the 20th of the reference month. The IGP-10 is based on prices from the 11th of previous month through 10th of current month.

Timing: released between the 5th and 10th day after the end of reference period.

Seasonal/focus: Not seasonally adjusted.

Revisions: None.

Comments: This is the only source of information on wholesale prices at the national level. It is used to adjust utility prices subject to indexed contracts. Given the high participation of commodity prices in the wholesale index, this inflation measure is susceptible to exchange rate volatility.

Public-sector net debt

Source: central bank of Brazil (BCB)

Description: Net public-sector debt corresponds to the net balance of the indebtedness of the public sector with the financial system, nonfinancial private sector and the rest of the world. The "public sector" is the nonfinancial public sector (federal, state and municipal direct administration, indirect administrations, social security systems, and nonfinancial federal, state and municipal enterprises) plus the central bank. Data are reported in *real* and as a percent of GDP. Net debt is calculated on an accrual basis and, differently from other countries, includes the monetary base.

Timing: Released at the end of following month.

Seasonal/focus: Not seasonally adjusted. Focus is on the level of net debt as a percent of GDP and the debt composition by type of indexation.

Revisions: not often.

Comments: The most important proxy for public-sector solvency. Closely watched by investors and rating agencies.

Public-sector borrowing requirement (PSBR)

Source: central bank of Brazil (BCB)

Description: Also termed the nominal deficit, this number is calculated as the nominal change in the balances of the net internal debt plus effective flows of external debt, converted into *real*. Data are reported in *real* and as a percent of GDP, with external flows converted into *real* at the average exchange rate. The exclusion of the nominal interest on net debt yields an "above the line" methodology to calculate the primary result, usually accounted as the difference between net revenues and nonfinancial expenditures.

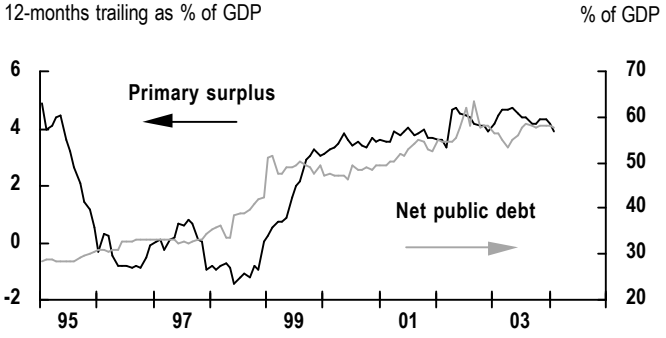
Timing: Released at end of following month.

Seasonal/focus: Not seasonally adjusted. Focus is on the year-end primary result as a percent of GDP target.

Revisions: Frequent.

Comments: This is the main performance criteria in the IMF borrowing agreements. The targets are set on a quarterly basis and defined in *real*. The report can be an important influence on credibility problems when the debt dynamics are poor.

Fiscal primary surplus and net public debt



JPMorgan Chase Bank, Buenos Aires
Vladimir Werning (1-212) 834-4144
vladimir.werning@jpmorgan.com
Florencia Vazquez (54-11) 4348-3405
florencia.m.vazquez@jpmorgan.com

Argentina

The monthly data cycle

Same month	Following month	Second following month
	First third	
	Tax revenues	
	Auto report	
	Cement sales	
	Help-wanted index	
	CPI & WPI	
Middle third	**Middle third**	
Consumer confidence	Industrial production (INDEC & FIEL)	
	Purchasing Manager survey	
	Composite confidence	
First third	**Final third**	**Final third**
	Construction activity	Economic activity indicator
	Formal private-sector payrolls	
	Merchandise Trade	
	Public-sector balance	
	Treasury balance	
	Nominal Wage index	

The quarterly data cycle

Following month	Second following month	Third following month
Central bank fx market report	Household Labor Report	Gross domestic product Balance of payments Gross public debt stock Provincial fiscal balance

The daily data cycle

Second following day
International reserves Monetary base Banking system deposits and loans

JPMorgan Chase Bank, Buenos Aires
Vladimir Werning (1-212) 834-4144
vladimir.werning@jpmorgan.com
Florencia Vazquez (54-11) 4348-3405
florencia.m.vazquez@jpmorgan.com

Gross domestic product

Source: National Bureau of National Accounts, INDEC (National Statistics Institute, www.indec.gov.ar)

Description: Quarterly series available since 93Q1. Released both in nominal and real terms with a fixed-weight system (1993=100). Both demand- and supply-side breakdowns are provided.

Timing: Released at the end of the third following month.

Seasonal/focus: Reported both unadjusted and seasonally adjusted. Thus, focus is on both yearly and quarterly changes.

Revisions: Minor revisions to previous quarter's figures.

Comments: Given the availability of more timely high-frequency economic activity indicators, the headline GDP figures do not attract much attention. The breakdown by expenditure provides useful information for analysts about the drivers of growth.

GDP composition in 2002

% of real total

Total GDP	100
Goods	32
Agriculture	6
Fishing	0
Mining	2
Manufacturing	16
Electricity, gas, and water	3
Construction	4
Services	68
Commerce	12
Transport and comm.	9
Financial services	6
Real state	16
Public sector	6
Other services	19

GDP composition in 2002

% of nominal total

Total GDP	100
Domestic demand	85
Consumption	74
Private	62
Public	12
Gross fixed investment	12
Exports	28
Imports	13

Economic activity indicator

Source: National Bureau of National Accounts, INDEC (National Statistics Institute, www.indec.gov.ar)

Description: Monthly index (1993=100) based on 1993 weights. Available since January 1993. Provides an early estimate of headline real GDP. Sectorial and demand components are not disclosed.

Timing: Released during the final third of the second following month.

Seasonal/focus: Both unadjusted and seasonally adjusted series are provided; hence, focus is on both oya and monthly changes.

Revisions: Subject to revisions, particularly in the seasonally adjusted version.

Comments: The report provides timely information on broad economic activity trends, given the 3-month lag for precise GDP figures. The seasonally adjusted series, in comparison with real GDP, tends to deliver relatively stronger performance in the first and last quarters of the year and weaker performance in the middle quarters.

Industrial production (INDEC)

Source: INDEC (National Statistics Institute, www.indec.gov.ar)

Description: Referred to as EMI (monthly industrial estimate), this monthly index (1997=100) is based on a 1997 weighting structure. Available since January 1994. Besides the index for the manufacturing sector as a whole, a breakdown of main subsectors is also reported.

Timing: A preliminary version is usually available in the third week of the following month in the afternoon. A final version (incorporating revisions) is released the following week.

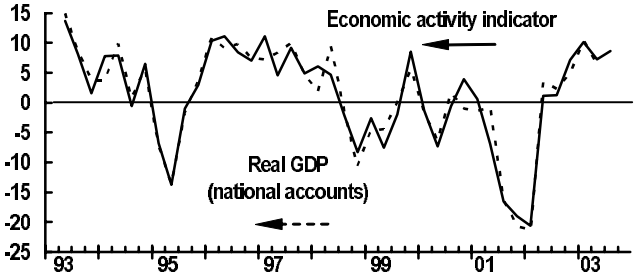
Seasonal/focus: Reported both unadjusted and seasonally adjusted. Thus, focus is on both oya and monthly changes.

Revisions: Minor revisions to the previous month's figures are frequent.

Comments: The report's timeliness and high correlation with broader activity indicators makes it one of the most closely tracked releases. A measure of manufacturing capacity use (% of total capacity) is included with the report. While over time industrial production performance reported by different

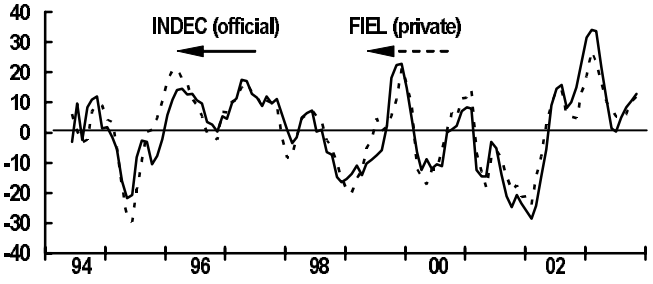
Economic activity indicator and real GDP

%q/q, saar



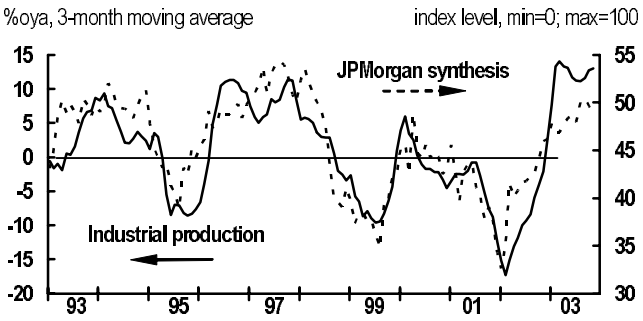
Industrial production

%3m/3m, saar



JPMorgan Chase Bank, Buenos Aires
Vladimir Werning (1-212) 834-4144
vladimir.werning@jpmorgan.com
Florencia Vazquez (54-11) 4348-3405
florencia.m.vazquez@jpmorgan.com

Industrial production (FIEL) and business sentiment



sources tends to converge thanks to data revisions, in the short run INDEC's series is considered more reliable than FIEL's series (see below).

Industrial production (FIEL)

Source: FIEL (Fundación de Investigaciones Económicas Latinoamericanas, www.fiel.org.ar), a private think tank.

Description: Referred to as IPI (industrial production indicator), this monthly index (1993=100) is based on 1993 weighting structure. The data are available since January 1980. Besides the index for the manufacturing sector as a whole, a breakdown of main subsectors is also reported.

Timing: Released monthly except for January's report (provided together with February data). A "preliminary" version is released usually in the third week of the following month in the afternoon. A "final" version (incorporating revisions) is released the following week.

Seasonal/focus: Reported both unadjusted and seasonally adjusted. Thus, focus is on both oya and monthly changes.

Revisions: Revisions to historical data are frequent and can be significant, particularly in the seasonally adjusted series.

Comments: The report's timeliness makes it one of the most closely tracked indicators. A measure of manufacturing capacity use (% of total capacity) is included with the report.

Purchasing manager survey (JPMorgan synthesis)

Source: Computed by JPMorgan, based on FIEL (Fundación de Investigaciones Económicas Latinoamericanas, www.fiel.org.ar).

Description: The diffusion index (min=0; max=100) reflects sentiment among business managers in the industrial sector. The headline index is a weighted average of the subcomponents from the survey (responses to questions about general conditions, demand trend, inventories, and outlook). It is released along with FIEL's preliminary production figures. Available since April 1987.

Timing: Same as FIEL's preliminary IP report.

Seasonal/focus: Not seasonally adjusted, nor subject to seasonality. Thus, focus is on monthly changes.

Revisions: Minor revisions to prior month (owing to partial or delayed survey results).

Comments: The index has proven to be a good leading indicator of trends in the industrial sector. Based on historical patterns, a reading of 45 for the JPMorgan synthesis is consistent with flat industrial production performance (on an over year ago basis).

Construction activity

Source: INDEC (national statistics institute, www.indec.gov.ar).

Description: Monthly index (1997=100). Measures construction activity in real terms based on the demand for specific key sectorial inputs. Available since January 1993.

Timing: Usually released during the final week of the following month in the afternoon.

Seasonal/focus: Reported both unadjusted and seasonally adjusted. Thus, focus is on both yearly and monthly changes.

Revisions: Minor revisions to the seasonally adjusted series are usual.

Comments: One of the few timely and reliable indicators measuring the performance of activity outside of the industrial sector. Can be severely affected by weather conditions.

Auto report

Source: ADEFA (automobile manufacturers' association, www.adefa.com.ar).

Description: Monthly volume (in number of units) of car production, domestic sales, and exports. Available since January 1993.

Timing: Usually released during the first week of the following month.

Seasonal/focus: Not seasonally adjusted. The factory retooling period falls generally in January-February, depressing production levels during those months. A seasonally adjusted series is computed by JPMorgan.

Revisions: Very minor revisions.

JPMorgan Chase Bank, Buenos Aires
Vladimir Werning (1-212) 834-4144
vladimir.werning@jpmorgan.com
Florencia Vazquez (54-11) 4348-3405
florencia.m.vazquez@jpmorgan.com

Comments: Together with cement sales, the auto report provides the first glimpse of activity trends for the prior month.

Cement sales

Source: AFCP (Portland cement manufacturers' association, www.afcp.com.ar).

Description: Monthly volume (tons) of total sales (including exports, which are not significant). Available since January 1970.

Timing: Usually released during the first week of the following month.

Seasonal/focus: Not seasonally adjusted.

Revisions: Minor, on a quarterly basis.

Comments: A timely and reliable indicator of trends in the construction sector. Cement sales, like construction activity, can be severely affected by weather conditions.

Composite confidence index

Source: JPMorgan, based on sectorial confidence surveys.

Description: A monthly diffusion index (min=0; max=100) which is computed as the weighted average of consumer confidence (UTDT), JPMorgan's synthesis of industrial manager confidence (FIEL) and retailer confidence (CAC). Available since September 1999.

Timing: Usually available during the third week of the following month, when FIEL's industrial managers survey is released.

Seasonal/focus: Not seasonally adjusted. Focus is on monthly changes.

Revisions: Minor revisions to prior month.

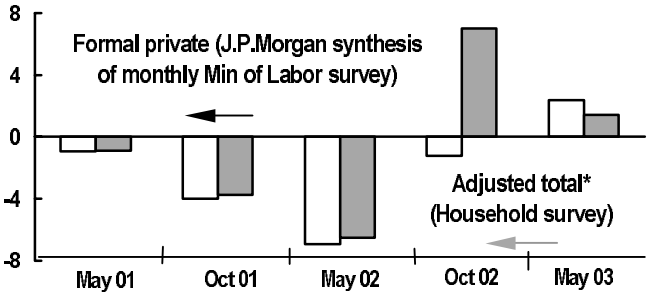
Comments: A timely and reliable indicator of trends in broad economic activity.

Household labor report

Source: INDEC (national statistics institute, www.indec.gov.ar)

Description: Referred to as EPH (permanent household survey). Starting from 03Q3, the survey is conducted in 28 cities on a quarterly basis (previously twice a year in May and October). Measures the urban unemployment, participation, and employment rates. A regional breakdown is also included. Available since 1973.

Employment
% change since last household survey, semiannual rate



* Adjusted to exclude those in the poverty relief plan

Timing: Released two and a half months after the survey is conducted.

Seasonal/focus: Not seasonally adjusted.

Revisions: None.

Comments: A key indicator, despite its low frequency. The data since 2002 have been affected by a national poverty relief plan for unemployed heads of household. INDEC provides the number of workers "employed" in this plan which allows adjustments to the headline figures.

Private-sector payroll survey

Source: Ministry of Labor, Secretariat of Employment (www.trabajo.gov.ar).

Description: Monthly payroll survey conducted among private companies in four major urban areas (Buenos Aires, Córdoba, Rosario and Mendoza). JPMorgan computes a weighted average of three (excluding Mendoza) individual city indices (June 1999=100). Available since December 1995.

Timing: Released during the final third of the following month.

Seasonal/focus: Not seasonally adjusted.

Revisions: None.

Comments: Not widely watched, although it does provide a rough indication of employment trends on a more timely basis than the broader household labor report.

Help-wanted index

Source: UTDT (Torcuato Di Tella university, www.utdt.edu).

Description: Monthly index (2000=100) of the number of hiring ads published in major BA city newspapers. Available since January 2000.

JPMorgan Chase Bank, Buenos Aires
Vladimir Werning (1-212) 834-4144
vladimir.werning@jpmorgan.com
Florencia Vazquez (54-11) 4348-3405
florencia.m.vazquez@jpmorgan.com

Timing: Released during the first week of the following month.

Seasonal/focus: Reported on a seasonally adjusted basis. Focus is on monthly changes.

Revisions: None.

Comments: A leading indicator of forthcoming employment trends.

Nominal wage index

Source: INDEC (National Statistics Institute, www.indec.gov.ar)

Description: Monthly index (Q4 2001=100) of nominal wages constructed as a weighted average of subindices for: private formal sector, private informal sector, and public sector wages. Monthly surveys among private companies and public sector information are the source for monthly data. An estimation of informal wages is obtained through INDEC's household survey (four times a year starting with Q3 2003).

Timing: Released during the last week of the following month.

Seasonal/focus: Not seasonally adjusted. Focus is on monthly changes.

Revisions: None.

Comments: One of the few reliable and timely indicators of wage income on a broad basis (other measures exist for specific sectors like manufacturing). This is a relatively new series, however, with history from October 2001.

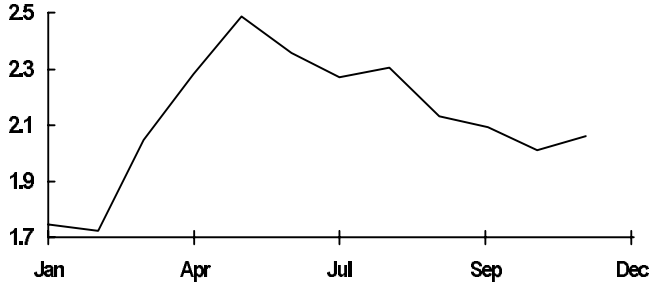
Consumer confidence

Source: UTDT (Universidad Torcuato Di Tella, www.utdt.edu).

Description: A monthly diffusion index (min=0; max=100), reflecting the balance of positive versus negative responses from a survey of telephone interviews in the Buenos Aires city area. Survey questions can be divided in three groups: those related to personal situation, macroeconomic expectations, and durable good purchase intentions. A level of 50 is considered neutral. Subindices for expectations and current conditions are also provided. Available since July 1998.

Timing: Released during the first third of the same month.

Exports: monthly seasonality
$ billion, 1996-2001 average



Seasonal/focus: Not seasonally adjusted. Focus is on monthly changes.

Revisions: None.

Comments: A limited indicator of consumption trends.

Merchandise trade

Source: INDEC (National Statistics Institute, www.indec.gov.ar).

Description: Monthly foreign trade statistics from customs, expressed in US dollars. Includes a breakdown of imports and exports by type of good and country of origin/destination. Breakdown of quantity and price movements is also available for total exports and imports. Complete series detail available on a monthly basis since January 1990.

Timing: Released during the last week of the following month.

Seasonal/focus: Data released both unadjusted and seasonally adjusted. Focus is primarily on the headline overall trade balance, as well as on oya changes in both exports and imports.

Revisions: Minor revisions to export data are frequent. Import figures are seldom revised, although minor changes can occur at the end of each year. Revisions to H1 figures are reported in September of the same year. Revisions to full year figures are reported in April of the following year.

Comments: Given the predominance of trade flows over financial flows following the January 2002 debt default, the trade report has become a key focus for the currency market. Export seasonality is heavily influenced by the agricultural export cycle which peaks in Q2.

JPMorgan Chase Bank, Buenos Aires
Vladimir Werning (1-212) 834-4144
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Florencia Vazquez (54-11) 4348-3405
florencia.m.vazquez@jpmorgan.com

Balance of payments

Source: National Bureau of International Accounts, INDEC (National Statistics Institute, www.indec.gov.ar).

Description: Quarterly international current and capital flows are reported, and a detailed breakdown provided. External debt figures are also reported, as well as a profile of upcoming debt maturities. Complete series breakdown available since 94Q1.

Timing: Released in the third following month.

Seasonal/focus: Not seasonally adjusted. Focus is on the current account balance, and to a lesser extent on the capital account breakdown by type of financing.

Revisions: Large revisions are frequent up to one year following initial release, owing to estimation errors.

Comments: The current account is reported on an accrued basis. Since the default was declared on public debt in January 2002, reported figures understate the level of the surplus on a cash basis, which has a more direct influence on the currency market. The central bank also publishes a quarterly fx market report with detailed information on all balance of payment transactions (on a cash basis) that impact the spot fx market. Given the 3-month lag for BOP figures, BCRA's report provides more timely—albeit partial—information regarding external flows.

Wholesale price index (IPIM)

Source: INDEC (National Statistics Institute, www.indec.gov.ar).

Description: Monthly index (1993=100) covering end-of-period observations between the 15th day of each month and the preceding one at the national level. Prices include taxes. Available since January 1956.

Composition of the IPIM

% weighting	
Overall wholesale prices	100.0
Domestic goods	92.7
Primary goods	19.4
Agricultural goods	13.6
Fish products	0.7
Mining products	5.1
Manufactures & energy	73.4
Manufactures	71.5
Energy	1.9
Imported goods	7.3

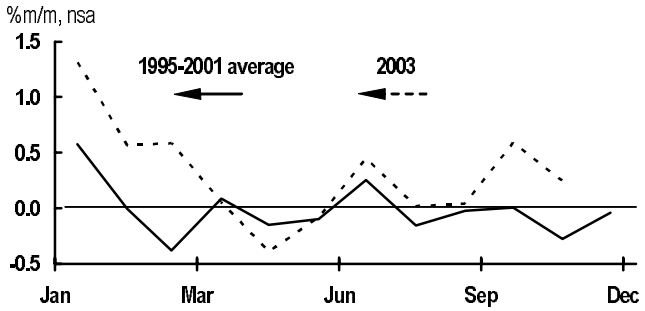
Timing: Usually released during the first week of the following month.

Seasonal/focus: Not seasonally adjusted. Focus is on both oya and m/m price changes.

Revisions: Minor revisions up to one month following the initial release.

Comments: Two alternative measures exist that exclude taxes (IPIB) and imported goods (PPI). There is no official core measure available.

Consumer prices: monthly seasonality



Consumer price index

Source: INDEC (National Statistics Institute, www.indec.gov.ar).

Description: Monthly index (1999=100) constructed from an average of observations taken throughout the month in Buenos Aires city. A breakdown into goods and services, and subcomponents, is also reported. Available since January 1943 (breakdown since April 1977).

Composition of the CPI

% weighting	
Overall CPI	100
Food	31
Clothing	5
Housing	13
Household appliances	7
Health	10
Transport, communication	17
Education	4
Leisure	9

Timing: Usually released during the first week of the following month.

Seasonal/focus: Not seasonally adjusted. Focus is on oya and monthly price changes.

Revisions: Not frequent.

Comments: A widely watched series. No official core measure is available, but JPMorgan computes a CPI index that excludes volatile components. The central bank publishes a quarterly inflation report (at the start of each quarter) which discusses the outlook for inflation and implications for monetary policy (BCRA will launch an inflation targeting regime in late 2004).

International reserves

Source: BCRA (central bank of Argentina, www.bcra.gov.ar)

Description: Daily level of official foreign reserves, expressed in US dollars.

Timing: Reported with a two-day lag.

Seasonal/focus: Not seasonally adjusted.

JPMorgan Chase Bank, Buenos Aires
Vladimir Werning (1-212) 834-4144
vladimir.werning@jpmorgan.com
Florencia Vazquez (54-11) 4348-3405
florencia.m.vazquez@jpmorgan.com

Revisions: None.

Comments: A key indicator of confidence during the Convertibility era (1991-2001), when the currency peg meant that the monetary base was linked to the balance of payments. Has remained a focus since the January 2002 float of the peso, but has also become much less volatile since then.

Monetary base

Source: BCRA (central bank of Argentina, www.bcra.gov.ar)

Description: Daily monetary base level and components are reported in nominal peso terms. The drivers behind daily changes are also reported.

Timing: Daily series, released with a two-day lag.

Seasonal/focus: Not seasonally adjusted.

Revisions: None.

Comments: A key indicator of the degree of monetary contraction or expansion. Seasonal influences can be important (peaks in money demand occur in July/August and December/January). Intra-month seasonality affects the composition of the monetary base given changes to currency in hands of the public (which increases during the first half of each month, and then gradually declines) and banks' reserves (which move in the opposite direction). The central bank also issues a monthly report discussing monetary performance and developments.

Financial system deposits and loans

Source: BCRA (central bank of Argentina, www.bcra.gov.ar)

Description: Daily level of deposits and loans at domestic private and public financial institutions, expressed in nominal pesos. A general breakdown by public and private sector deposit or credit, and a detailed breakdown by type of deposit or credit, are reported. Details of currency and maturity structure are also available.

Timing: Reported with a two-day lag.

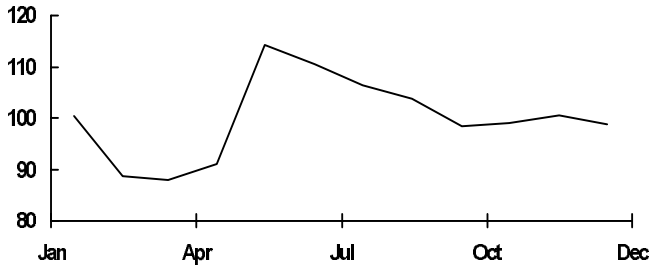
Seasonal/focus: Not seasonally adjusted.

Revisions: Large revisions up to one month from initial release are usual, owing to delays in information received from banks by the central bank (and for loans, also owing to classification changes).

Comments: A key indicator of confidence during the Convertibility era (1991-01), when the currency peg meant that the monetary base was linked to the balance of payments. Still widely watched.

Tax revenues: monthly seasonality

annual average 1997-2003=100



Tax revenues

Source: Undersecretariat of Public Revenues, Ministry of the Economy (www.mecon.gov.ar).

Tax collections

% of last 12-month total

Total tax collections	100
VAT	28
Income tax	21
Social Security receipts	14
Export tax	13
Financial transactions tax	8
Other	16

Description: Monthly tax revenues collected by the central government (includes "Coparticipación" which are taxes collected on behalf of and automatically transferred to provinces). Available since January 1991.

Timing: Released in the first working day of the following month.

Seasonal/focus: Not seasonally adjusted. Focus is on both levels and oya changes. Income and personal asset tax deadlines boost revenues in Q2 while the payment of "aguinaldo" bonuses boost Social Security receipts in January and July.

Revisions: None.

Comments: A key report. The subset of activity-linked taxes (among which VAT is a major component) is a leading indicator of the economic cycle. It also constitutes a gauge of immediate import and export performance as reflected by export and import tax receipts.

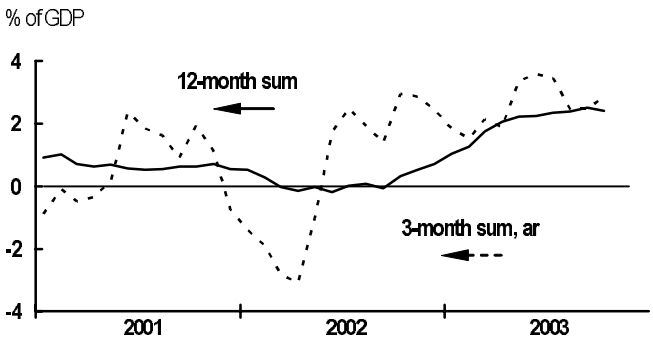
Treasury balance

Source: Secretariat of the Treasury, Ministry of the Economy (www.mecon.gov.ar)

Description: Monthly balance reported on a cash basis. While a "narrow" measure of fiscal performance, it offers a

JPMorgan Chase Bank, Buenos Aires
Vladimir Werning (1-212) 834-4144
vladimir.werning@jpmorgan.com
Florencia Vazquez (54-11) 4348-3405
florencia.m.vazquez@jpmorgan.com

Public sector primary balance



reasonable approximation for the broader public- sector balance. Provides a revenue and expenditure breakdown. While it includes regular transfers from the central bank (BCRA) to the Treasury as revenues, it does not reflect the overall BCRA quasi-fiscal deficit or surplus.

Timing: Released by the last week of the following month together with the public-sector balance report.

Seasonal/focus: Not seasonally adjusted. Focus is currently on the level of the primary balance.

Revisions: Limited.

Comments: A widely watched series; particular focus is on the primary balance (excluding interest payments). Can be quite volatile as it is subject to tax revenue and spending seasonality, and to the impact of one-off fiscal measures as well as continuous revisions to the tax code.

Public-sector balance

Source: Secretariat of the Treasury, Ministry of the Economy (www.mecon.gov.ar)

Description: Monthly overall public sector balance measured on a cash basis. Aggregates the fiscal balances of the Treasury, autonomous state entities (with social security being the most relevant) and state companies (which are not meaningful in size).

Timing: Released by the last week of the following month.

Seasonal/focus: Not seasonally adjusted.

Revisions: Minor, when the year end report is published.

Comments: A widely watched series.

Provincial government fiscal balance

Source: National Bureau of Provincial Fiscal Coordination, Ministry of the Economy (www.mecon.gov.ar)

Description: Quarterly balance measured on a cash basis. Provides a provincial aggregate and a breakdown for the 24 provinces (available later). Revenues and spending items are detailed.

Timing: Released in an *ad hoc* fashion with approximately a four-month lag.

Seasonal/focus: Not seasonally adjusted.

Revisions: Significant.

Comments: Given Argentina's fiscal architecture and the size of aggregate provincial budgets the fiscal behavior of the latter is relevant although the lack of timely data reduces attention to this report. Alternatively, fiscal trends at the provincial level can be tracked by the decentralized reporting of individual provincial tax revenue performance (with focus on the handful of main districts).

Gross public-sector debt stock

Source: Secretariat of Finance, Ministry of the Economy (www.mecon.gov.ar)

Description: Quarterly public-sector debt stock encompassing the debt of the national government. Includes a detailed breakdown by creditor, instrument, maturity, and currency denomination. Average interest rates on debt stocks, average life of debt and other debt statistics are also reported. The profile of upcoming debt service payments is projected while financial assets are reported separately.

Timing: Released in the third following month.

Seasonal/focus: Not seasonally adjusted. Focus is on total stock and changes.

Revisions: Minor adjustments to previous quarter's levels are usual.

Comments: Provincial sector debt is not aggregated as it is reported separately and in an *ad hoc* manner.

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vladimir.werning@jpmorgan.com
Florencia Vazquez (54-11) 4348-3405
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Chile

The monthly data cycle

Same month	Following month	Second following month
	First third	**First third**
	Wholesale price index	Economic activity indicator
	Consumer price index	Nominal and real wages
	Merchandise trade	
	Statistical preview (BCCh bulletin)	
	Middle third	**Middle third**
	Consumer confidence	Public-sector balance
	Final third	
	Industrial production and sales	
	Employment report	
	Real retail sales	
	BCCh bulletin	
	Home and auto sales	

The quarterly data cycle

Following month	Second following month	Third following month
	Final third	**Final third**
	National accounts	Central government debt
	Balance of payments report	

The weekly data cycle

Same month	Following month	Second following month
Middle third	**First third**	
Intl reserves H1	International reserves (monthly average)	
Monetary aggregates H1	Monetary aggregates (monthly average)	

JPMorgan Chase Bank, Buenos Aires
Vladimir Werning (1-212) 834-4144
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Florencia Vazquez (54-11) 4348-3405
florencia.m.vazquez@jpmorgan.com

National accounts

Source: central bank of Chile (www.bcentral.cl)

Description: Quarterly series, released both in nominal and real terms, the latter deflated using a fixed-weight index of 1996 prices. Supply-side and demand-side breakdowns are provided. Inventories are reported as part of consumption except in the annual series. The central bank will start publishing a quarterly index of inventory levels; no specific date has been set. Available since January 1986.

GDP composition in 2002

% of real total

Total GDP	100
Goods	44
Agriculture	5
Fishing	2
Mining	9
Manufacturing	17
Electricity, gas and water	3
Construction	8
Services	56
Retail	11
Transport and comm.	8
Financial services	13
Public sector	4
Other services	19

Timing: Released during the final third of the second following month, except for the Q4 report, which includes annual series; that report is usually available in March.

Seasonal/focus: Reported both unadjusted and seasonally adjusted. Focus is on both yearly and quarterly changes.

Revisions: Minor revisions to previous quarters' figures.

Comments: Given the availability of more timely, high-frequency activity indicators, the headline GDP figures do not attract much attention. The breakdown by expenditure is tracked for guidance regarding the drivers of growth.

Economic activity indicator (IMACEC)

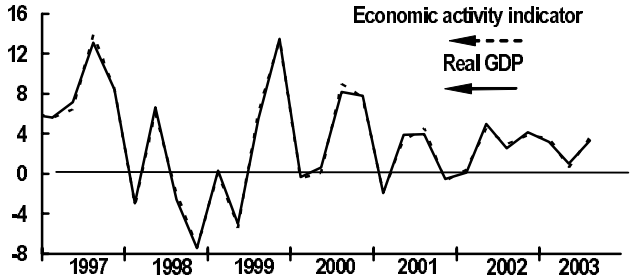
Source: central bank of Chile (www.bcentral.cl)

Description: Monthly index (1996=100) providing an early approximation to output-based GDP. Available since January 1982.

Timing: Released in the first third of the second following month, before BCCh's monthly monetary policy meeting.

Real GDP and economic activity indicator

%q/q, saar



Seasonal/focus: Reported unadjusted and seasonally adjusted. Thus, focus is on both oya and monthly changes.

Revisions: Revisions to seasonally adjusted series are usual.

Comments: Closely tracked by markets.

Industrial production and sales

Source: INE, national statistics institute (www.ine.cl)

Description: Monthly indices (1989=100) using 1989 industry weights. The weighting structure will be changed to 2001 figures in 2004. In the future, weights will be changed each year according to the latest industrial survey available. A breakdown by major sectors and type of good is also reported. Available since January 1991.

Timing: Monthly series, released during the last week of the following month.

Seasonal/focus: Reported both unadjusted and seasonally adjusted; the latter with a 10-day lag. Focus is on oya changes.

Revisions: Minor revisions are made to the seasonally adjusted measure.

Comments: The copper sector is excluded from these data. Divergences between output and sales are often interpreted as evidence of shifts in inventory trends.

Auto sales

Source: ANAC (national automobile association, www.anac.cl)

Description: Monthly volume (in number of units) of car sales.

Timing: Released during the final third of the following month.

Seasonal/focus: Not seasonally adjusted; focus is on oya changes.

Revisions: Minor.

Comments: a timely indicator of durable goods consumption.

Employment report

Source: INE, national statistics institute (www.ine.cl)

Description: Monthly series for employment, labor force, and unemployment are reported as 3-month moving averages. A breakdown of employment by main sector, geographical

JPMorgan Chase Bank, Buenos Aires
Vladimir Werning (1-212) 834-4144
vladimir.werning@jpmorgan.com
Florencia Vazquez (54-11) 4348-3405
florencia.m.vazquez@jpmorgan.com

region, age group, and gender is also provided. Available since January 1985.

Timing: Released during the last week of the following month.

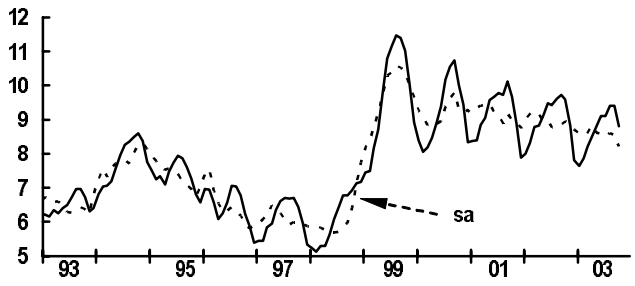
Seasonal/focus: Employment levels and the unemployment rate are reported both unadjusted and seasonally adjusted. Focus is on oya changes.

Revisions: None.

Comments: Correct interpretation requires awareness of seasonal considerations. The unemployment rate tends to increase during the winter months (from April to September). The central bank has also started to publish a series of hiring ads in five major newspapers. A breakdown by region is available. A seasonally adjusted series is reported as well.

Unemployment rate

% of labor force, 3-mma



Nominal and real wages

Source: INE, national statistics institute (www.ine.cl)

Description: Monthly series for nominal and real wages based April 1993=100. Breakdowns by main economic sectors and type of work are also provided. Available since January 1974.

Timing: Released during the first week of the second following month.

Seasonal/focus: Not seasonally adjusted. Focus is on oya changes.

Revisions: None.

Comments: Changes in real wages provide information about labor market trends. New series based on a more modern salary structure will be published early in 2005.

Real retail sales

Source: national chamber of commerce, services and tourism (www.cnc.cl)

Description: Monthly index (2002=100) measuring real retail sales on a same-store basis. A breakdown by type of consumer goods is reported. Available since January 1992.

Timing: Released during the third week of the following month.

Seasonal/focus: Not seasonally adjusted. Focus is on oya changes.

Revisions: Revisions take place within two months of the original release.

Comments: A timely indicator for consumption, which is highly correlated with employment trends. A new retail sales index is expected to be released by the central bank in the near term.

Consumer confidence (Adimark)

Source: Adimark (www.adimark.cl)

Description: Monthly diffusion index (min=0; max=100) reflecting the balance of positive versus negative responses from a survey of 1000 interviews in Chile's main urban centers. An index level of 50 is considered neutral. Survey questions relate to personal economic situation, current and expected macroeconomic conditions, and intentions to purchase durable goods. Available since 1981 on a quarterly basis and since March 2002 on a monthly basis.

Timing: Released during the second week of the following month.

Seasonal/focus: Not seasonally adjusted. Focus is on monthly changes.

Revisions: None.

Comments: A limited indicator of consumption trends.

Home sales

Source: Chilean construction chamber (www.cchc.cl)

Description: Monthly volume (in number of units) of home sales in the greater Santiago area. Total stocks of homes for sale are also reported.

Timing: Released during the final third of the following month.

Seasonal/focus: Not seasonally adjusted; focus is on oya changes.

Revisions: None.

Comments: A timely indicator of durable goods consumption trends.

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Vladimir Werning (1-212) 834-4144
vladimir.werning@jpmorgan.com
Florencia Vazquez (54-11) 4348-3405
florencia.m.vazquez@jpmorgan.com

Merchandise trade

Source: Central bank of Chile (www.bcentral.cl)

Description: Monthly foreign trade statistics from customs clearance (reported on a FOB-FOB basis), including import and export breakdowns by type of good and country of origin/destination. Data are in US dollar terms. Available since January 1980.

Merchandise trade

% of total, 1995-2002 average

Exports	100
Copper	36
Non copper	64
Imports	100
Consumer goods	18
Intermediate goods	58
Capital goods	24

Timing: Totals are released in the first week of the following month; breakdown by type of goods one week later. Note that preliminary weekly exports and imports are released each week with a one-week lag.

Seasonal/focus: Seasonally adjusted series available only for total imports (CIF basis) and for imports excluding oil. Focus is on oya changes in exports and imports.

Revisions: Minor.

Comments: A widely watched report given the large size of the external sector. Non-copper exports and non-oil imports are tracked as indicators of cyclical trends in domestic activity. Imports can be very volatile from one month to the next as shifts in the currency create incentives for importers to time their reporting.

Balance of payments report

Source: INE, national statistics institute (www.ine.cl)

Description: Quarterly international current and capital flows, expressed in US dollars. A detailed breakdown by main components is also reported. Available since Q1 1980.

Timing: Reported during the final third of the second following month.

Seasonal/focus: Not seasonally adjusted. Focus is on the current account balance.

Revisions: Revisions tend to occur up to one year following initial release.

Comments: None.

Wholesale price index

Source: INE, National Statistics Institute (www.ine.cl)

Description: A monthly index (June 1992=100). A breakdown is provided by major components and by domestic vs. imported goods. Separate indices for consumption, intermediate, and capital goods are reported as well. Available since January 1970.

Composition of WPI

% weighting

Wholesale prices	100.0
Domestic goods	92.7
Primary goods	19.4
Agricultural goods	13.6
Fish products	0.7
Mining products	5.1
Manufactures and energy	73.4
Manufactures	71.5
Energy	1.9
Imported goods	7.3

Timing: Monthly series, released during the first week of the following month.

Seasonal/focus: Not seasonally adjusted. Focus is both on oya and monthly changes.

Revisions: None.

Comments: the National Statistics Institute will release a new producer price index (excluding imported goods) starting 04Q2. It is not defined yet whether the new PPI will replace the old WPI or both indices will coexist.

Consumer price index

Source: INE, National Statistics Institute (www.ine.cl)

Description: Monthly index (currently based December 1998=100 and using 1996-1997 weights) for the Santiago city area. A breakdown by major components is also provided. Separately, indices are reported for tradable and non-tradable goods, and for intermediate, consumption and capital goods. An official "core" measure—which excludes volatile fresh vegetables, fruit, and fuel— is also reported. Available since January 1928.

Composition of the CPI

% weighting

Consumer prices	100
Food	27
Housing	20
Household equipment	8
Clothing	8
Transport	12
Health	9
Education and leisure	11
Other	4

Timing: Released during the first week of the following month.

Seasonal/focus: Not seasonally adjusted. Focus is both on oya and monthly changes.

Revisions: None.

JPMorgan Chase Bank, Buenos Aires
Vladimir Werning (1-212) 834-4144
vladimir.werning@jpmorgan.com
Florencia Vazquez (54-11) 4348-3405
florencia.m.vazquez@jpmorgan.com

Comments: A key data release because of the central bank's inflation targeting framework. Markets tend to focus on the "core" figure which excludes volatile components.

Monetary aggregates

Source: central bank of Chile (www.bcentral.cl)

Description: Monthly averages of peso-denominated monetary aggregates.

Timing: Series are reported twice a month, during the first third (first half of the month release) and the final third (end-month release).

Seasonal/focus: Seasonally adjusted measures are provided for the monthly more liquid aggregates (currency in circulation, M1 and M2). Focus is on oya changes.

Revisions: Small.

Comments: Weekly averages are also released for some of the monetary aggregates.

International reserves

Source: central bank of Chile (www.bcentral.cl)

Description: Weekly stock of the central bank's international reserves, expressed in US dollars.

Timing: Reported each week with a one-week lag.

Seasonal/focus: Focus is on monthly changes.

Revisions: None.

Comments: None.

Public-sector balance

Source: Direccion de Presupuestos (www.dipres.cl)

Description: Monthly central government balance of revenues and spending, measured on an accrual basis. A breakdown by local and foreign currency-denominated flows is also included. Government payments into or disbursements from certain funds (see below) are excluded, but quarterly reports include adjustments that seek consistency with international standards. Quarterly reports also provide: revenues and spending as a percent of planned execution, changes in real terms, a breakdown of revenues by tax, and statistics on central government domestic and external debt. Annual reports offer a broader coverage of fiscal activities including municipalities and nonfinancial public companies. Annual figures are reported in nominal and real terms, and as a percent of GDP.

Timing: Reports are released during the middle third of the second following month.

Seasonal/focus: Not seasonally adjusted. Focus is on the headline overall balance of the central government.

Revisions: Minor.

Comments: Revenues and spending are accounted for net of government payments to or disbursements from the copper compensation fund (FCC) and oil price stabilization fund (FEPP). Also, 10% of copper revenues are accounted for separately from government accounts as they are specifically earmarked for the military.

JPMorgan Chase Bank, New York
Jimena Esponda (1-212) 834-7316
jimena.esponda@jpmorgan.com

Colombia

The monthly data cycle

Following month	Second following month	Third following month
First half	**First half**	**First half**
Consumer price index	Unemployment rate	Industrial production
Wholesale price index		
Second half	**Second half**	**Second half**
		Trade balance
		Retail sales

The quarterly data cycle

Following month	Second following month	Third following month
		Real GDP
		Balance of payments

JPMorgan Chase Bank, NewYork
Jimena Esponda (1-212) 834-7316
jimena.esponda@jpmorgan.com

Gross domestic product

Source: Departamento Administrativo Nacional de Estadistica (DANE, national statistics institute).

Description: Quarterly and annual national accounts, released both in nominal terms and in real terms (1994 prices) deflated by a fixed-weight Laspeyres index. A breakdown by both expenditure and output components is included in the report.

Timing: Released during the final third of the third following month.

Seasonal/focus: Reported both unadjusted and seasonally adjusted. Thus, focus is on both yearly and quarterly changes.

Revisions: Minor revisions to both the unadjusted series and the seasonally adjusted series.

Comments: Given the lack of more timely activity indicators, the report is closely followed, and moves markets whenever it is different than expected.

GDP composition in 2001
% of total, in constant 1994 prices

GDP	**100.0**
Agriculture	13.9
Mining	4.4
Electricity, gas and wate	3.1
Manufacturing	14.1
Construction	4.5
Commerce and tourism	10.6
Transport and communications	8.1
Financial sector	4.8
Eucation	5.1
Other services	12.2
Public admini. and defense	9.6
Social services	4.3
Other	5.4

Source: National Statistics Institute (DANE).

GDP by type of expenditures
% of total (in constant prices of 1994)

GDP	**100**
Consumption	84.2
Private	62.9
Public	21.3
Investment	15
Fixed investment	13.9
Change in inventory	1.1
Net exports	0.8

Source: National Statistics Institute (DANE).

Industrial production

Source: Departamento Administrativo Nacional de Estadistica (DANE, national statistics institute).

Description: Monthly index (2001=100) based on a nationwide survey of industrial managers. JPMorgan compiles a monthly synthesis of the manufacturing components. The series excludes coffee processing, whose growth in recent years has run two to four percentage points higher than that of overall IP.

Timing: Released during the first half of the third following month.

Seasonal/focus: Reported only on an unadjusted basis. JPMorgan calculates a seasonally adjusted series. Focus is on both oya and monthly changes.

Revisions: Revisions occur frequently.

Comments: A very helpful monthly report for analyzing overall economic activity.

Unemployment report

Source: Departamento Administrativo Nacional de Estadistica (DANE, national statistics institute).

Description: Monthly unemployment rate, as measured by a household survey (Encuesta Continua de Hogares) conducted weekly. Underemployment rates also presented, as well as a regional breakdown of both rates. Underemployed persons are defined as those working less than 48 hours per week who would like to work more hours. DANE reports monthly averages for the 13 main cities and nationwide. The series was changed in January 2000 making comparison with earlier data impossible.

Timing: Released during the first half of the second following month.

Seasonal/focus: Not seasonally adjusted.

Revisions: None.

Comments: An important indicator, closely followed by the local market because of its political and social implications.

Retail sales

Source: Departamento Administrativo Nacional de Estadistica (DANE, national statistics institute).

Description: A monthly index in real terms (1999=100), based on a nationwide survey of 375 retail companies The report includes a breakdown by components. A series excluding the volatile fuel and automobile sales components is also reported.

Timing: Released in the second half of the third following month.

Seasonal/focus: Not seasonally adjusted. Focus is primarily on oya figures.

Revisions: None.

Comments: Since figures are reported with a three-month lag, the information is not very helpful as a leading indicator of economic activity.

JPMorgan Chase Bank, New York
Jimena Esponda (1-212) 834-7316
jimena.esponda@jpmorgan.com

Merchandise trade

Source: Departamento Administrativo Nacional de Estadistica (DANE, national statistics institute).

Description: A monthly report of foreign trade in US dollar terms, from customs clearance statistics. Imports and exports are broken down by type of good and country of origin or destination.

Distribution of trade by country
% of total in 2002

Exports	**100**
United States	43
European Union	14
Andean Community	20
Rest of Latin America	15
Other	9
Imports	**100**
United States	32
European Union	14
Andean Community	11
Rest of Latin America	17
Other	26

Source: Central Bank of Colombia

Timing: Export data are released during the second half of the second following month; imports are released during the second half of the third following month.

Seasonal/focus: Not seasonally adjusted. Focus is primarily on the monthly trade balance, with special attention to bilateral trade with main trading partners.

Revisions: Minor revisions.

Comments: Closely followed by the fx market.

Balance of payments

Source: Central bank of Colombia (Banco de la Republica).

Description: Quarterly report of international current and capital flows in US dollar terms. From 1994 onwards, the figures correspond to the IMF's methodology.

Timing: Released in the third following month.

Seasonal/focus: Not seasonally adjusted.

Revisions: Frequent revisions to previous quarters are reported together with the new quarterly figures.

Comments: Complements the more frequent trade data with capital account trends. Followed by the fx market.

Wholesale price index

Source: Departamento Administrativo Nacional de Estadistica (DANE, national statistics institute).

Description: Monthly index (June 1999=100), including a breakdown by end use category (intermediate, final, capital, and construction goods).

Timing: Usually released during the first week of the following month.

Seasonal/focus: Not seasonally adjusted. Focus is on over-year-earlier and monthly changes.

Revisions: None.

Comments: A widely watched series as it tends to be a good predictor of consumer price trends.

Consumer price index

Source: Departamento Administrativo Nacional de Estadistica (DANE, national statistics institute).

Description: Monthly index (Dec 1998=100, but based on a 1994-95 consumption basket), constructed from observations throughout the month and covering thirteen cities. Breakdown provided by type of good and by city. No official core inflation measure is presented.

Timing: Usually released during the first week of the following month.

Seasonal/focus: Not seasonally adjusted. Focus is on oya and m/m changes.

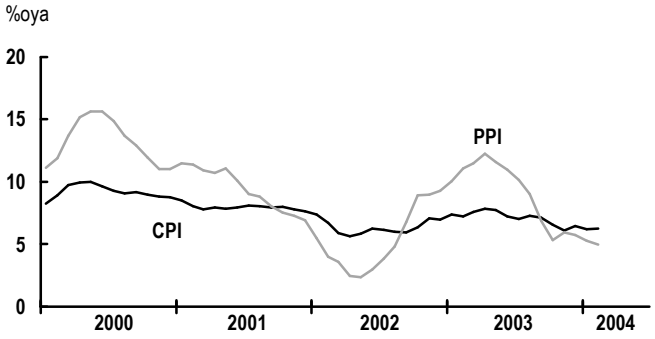
Revisions: None.

Comments: A widely watched series as it is included as one of the targets linked to the IMF agreement. It also drives central bank decision on interest rates.

Central Bank reports the data on a q/q basis.

Revisions: Minor revisions.

Consumer and producer prices



JPMorgan Chase Bank, New York
Jimena Esponda (1-212) 834-7316
jimena.esponda@jpmorgan.com

Ecuador

The monthly data cycle

Following month	Second following month	Third following month
First half	**First half**	**First half**
Consumer price index	Trade balance	
	Wholesale price index	
	Economic activity indicator	
Second half	**Second half**	**Second half**
	Unemployment rate	

The quarterly data cycle

Following month	Second following month	Third following month
		Real GDP
		Balance of payments

JPMorgan Chase Bank, New York
Jimena Esponda (1-212) 834-7316
jimena.esponda@jpmorgan.com

Gross domestic product

Source: Central bank of Ecuador (BCE).

Description: Quarterly and annual national accounts, released both in nominal and real terms (2000 prices) deflated using a fixed-weight Laspeyres index. A breakdown by expenditure and output components is included in the report.

GDP by type of expenditure
% of total in real terms

GDP	**100**
Total consumption	73.6
Private	9.4
Public	64.2
Gross fixed investment	21.9
Change in inventory	4.3
Net exports	0.2

Source: Central Bank of Ecuador

Timing: Released during the final third of the third following month.

Seasonal/focus: Reported on a seasonally adjusted basis. Thus, focus is on both yearly and quarterly changes. The central bank reports the data on a q/q basis.

GDP composition in 2001
% of total, in constant 2000 prices

GDP	**100**
Agriculture	8.8
Fishing	1.4
Mining	20.8
Manufacturing	13.3
Electricity and water	1.1
Construction	7.0
Commerce	15.5
Hotels and restaurants	1.2
Transport and communication	10.4
Social services	4.8
Real Estate	6.5
Other	9.2

Source: Central Bank of Ecuador.

Revisions: Minor revisions.

Comments: Given the lack of more timely activity indicators, the information that this release provides is closely followed by the market.

Economic activity indicator (IDEAC)

Source: Central Bank of Ecuador (BCE).

Description: Monthly index of economic activity, including industrial and manufacturing production.

Timing: Released during the first half of the second following month.

Seasonal/focus: Data released both unadjusted and seasonally adjusted; hence focus is on both oya and monthly changes.

Revisions: Subject to revisions.

Comments: Partly because of frequent revisions, the indicator does not efficiently predict GDP changes.

Unemployment

Source: Instituto Nacional de Estadisticas y Censos (INEC, national statistics institute).

Description: Monthly unemployment rate, as measured by a household survey (Encuesta Permanente de Hogares). Underemployment rates also provided, as well as a gender and age breakdown of both rates. INEC also reports a monthly unemployment figure for the 3 main cities (Quito, Guayaquil and Cuenca).

Timing: Released during the second half of the second following month.

Seasonal/focus: Not seasonally adjusted.

Revisions: None.

Comments: Gets little attention from the market.

Merchandise trade

Source: Central bank of Ecuador (BCE).

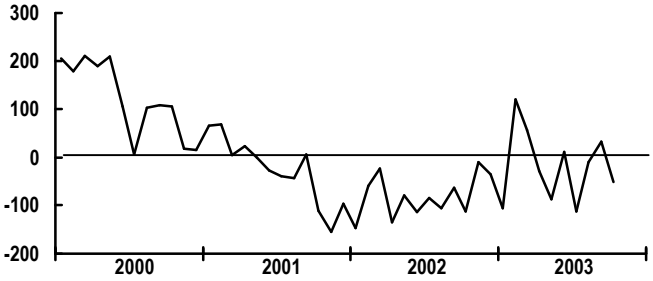
Description: Monthly imports and exports in US dollar terms based on customs clearances, broken down by type of good and country of origin or destination.

Timing: Released during the first half of the second following month.

Seasonal/focus: Not seasonally adjusted. Focus is primarily on the monthly trade balance. Construction of the huge OCP pipeline during 2001-2002 caused capital goods imports to reach historically high levels, resulting in big trade deficits. The situation began to normalize in 2003 and oil exports are expected to increase once the new pipeline starts pumping oil.

Revisions: Minor.

Merchandise trade balance
US$ million, nsa, f.ob./f.obs basis



JPMorgan Chase Bank, New York
Jimena Esponda (1-212) 834-7316
jimena.esponda@jpmorgan.com

Comments: Trade figures are closely watched by the market, as they are a good indicator of the country's competitiveness, a key factor for the sustainability of dollarization.

Balance of payments

Source: Central bank of Ecuador (BCE).

Description: Quarterly report of international current and capital flows in US dollar terms, based on the IMF's methodology outlined in the fifth edition of the BoP manual.

Timing: Released on the second half of the third following month.

Seasonal/focus: Not seasonally adjusted.

Revisions: Revisions to previous quarters are reported together with the figures of new quarters.

Wholesale price index

Source: Instituto Nacional de Estadisticas y Censos (INEC, national statistics institute).

Description: Monthly index (1995=100). Only goods produced by the agriculture, fishing, manufacturing, and mining sectors are included in the index.

Timing: Usually released during the first week of the second following month.

Seasonal/focus: Not seasonally adjusted. Focus is on oya and m/m series.

Revisions: None.

Comments: Because the figures are reported with a two-month lag, they are not closely watched by the market.

Consumer price index

Source: Instituto Nacional de Estadisticas y Censos (INEC, national statistics institute).

Description: Monthly index (Sep 94-Aug 95=100), including a breakdown by goods and services and by region. No official core inflation measure is presented. The institute is expected to compile a new food basket by 2004, which will result in a new CPI index.

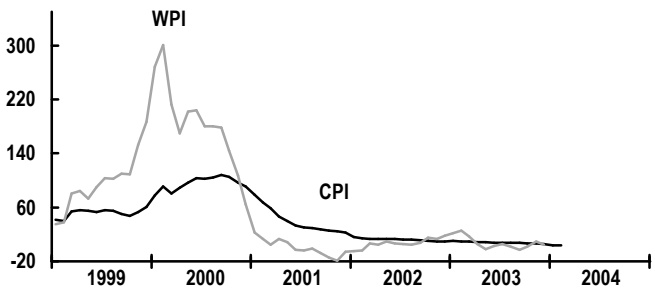
Timing: Usually released during the last day of the same month.

Seasonal/focus: Not seasonally adjusted. Focus is on oya and m/m series.

Revisions: None.

Comments: A widely watched series. Because Ecuador is a dollarized economy, the key objective of monetary policy is to have local inflation converge to international levels.

Consumer and wholesale prices



JPMorgan Chase Bank, New York
Jimena Esponda (1-212) 834-7316
jimena.esponda@jpmorgan.com

Peru

The monthly data cycle

Following month	Second following month	Third following month
First half	**First half**	**First half**
Consumer price index	Unemployment rate	
Wholesale price index		
Second half	**Second half**	**Second half**
	Trade balance	
	Real GDP	
	Central government balance	

The quarterly data cycle

Following month	Second following month	Third following month
	Real GDP (quarterly)	
	Balance of payments	

The daily data cycle

Following day	Second following day	Third following day
		International reserves

JPMorgan Chase Bank, New York
Jimena Esponda (1-212) 834-7316
jimena.esponda@jpmorgan.com

Gross domestic product

Source: Instituto Nacional de Estadistica e Informatica (INEI, national statistics institute).

Description: The INEI reports monthly, quarterly and annual series, both in nominal and real terms based on 1994 prices, using a fixed-weight system. A breakdown by expenditure and output components is included in the report.

GDP composition in 2001
% of total

GDP	**100**
Agriculture	7.6
Fishing	0.7
Mining	4.7
Manufacturing	16
Electricity and water	1.9
Construction	5.6
Commerce	14.6
Other services	39.2
Import / Other Duties	9.7

Source: National Statistics Institute (INEI).

Timing: the quarterly series are released during the final third of the third following month. The monthly series are reported in the second half of the second following month.

GDP by type of expenditure in 2002
% of total

GDP	**100**
Consumption	82.6
Private	71.7
Public	10.9
Investment	18.5
Fixed investment	17.2
Private	14.4
Public	2.8
Change in inventory	1.3
Net exports	-1

Source: Central Bank of Peru

Seasonal/focus: Reported both unadjusted and seasonally adjusted. Thus, focus is on yearly, quarterly and monthly changes. The 3m/3m, saar series is closely watched as it is a good predictor of trends.

Revisions: Subject to revisions, particularly the monthly figures as they are compiled using preliminary data.

Comments: The monthly series are closely followed by the market as an indication of economic activity trends. The INEI announced in 2003 that it was revising its methodology for calculating monthly GDP numbers and that it plans to publish a new series soon.

Unemployment report

Source: Instituto Nacional de Estadistica e Informatica (INEI, national statistics institute).

Description: Monthly unemployment rates for metropolitan Lima, and quarterly unemployment rates for the country as a whole (the latter from the Encuesta Nacional de Hogares, or national household survey). Underemployment rates also provided, as well as a breakdown by region, gender, and age group. Underemployed persons are defined as those working less than 35 hours per week who would like to work more hours.

Timing: Released during the first half of the second month following the reference period.

Seasonal/focus: Not seasonally adjusted.

Revisions: None.

Comments: The Lima report is used more because it is more timely than the national report.

Urban unemployment in 2001
% of labor force

Nationwide rate	**7.9**
Male	7.2
Female	8.7
14-24 years	13.0
25-44 years	6.3
45-54 years	5.4
55 years and more	7.0
Metropolitan Lima	8.8
Coast	8.3
Sierra	6.6
Jungle	4.6

Source: Central Bank of Peru.

Merchandise trade

Source: Central Bank of Peru (BCRP).

Description: Monthly foreign imports and exports in US dollar terms, based on customs clearances. Breakdown is provided by type of good and country of origin or destination.

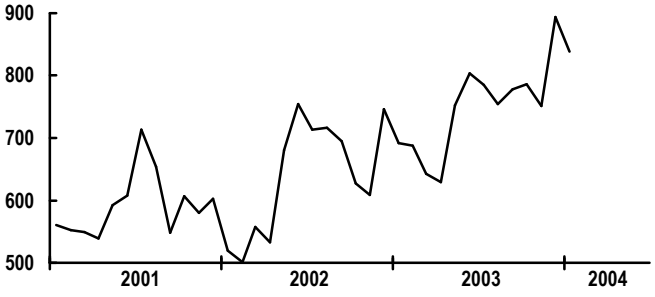
Timing: Released during the second half of the second following month.

Seasonal/focus: Not seasonally adjusted. Focus is primarily on the monthly trade balance, with special attention to bilateral trade with main trading partners.

Revisions: Minor.

Comments: Exports led the 2001-03 economic advance, driven by the key mining sector. In 2003, the US government granted Peru an extension until 2006 of benefits under the ATPDEA agreement, allowing Peruvian goods to be sold tax-free in the US. The extension of the accord has resulted in increased exports to the US, led by textiles.

Merchandise exports
million US$, nsa



JPMorgan Chase Bank, New York
Jimena Esponda (1-212) 834-7316
jimena.esponda@jpmorgan.com

Balance of payments

Source: Central Bank of Peru (BCRP).

Description: Quarterly report of international current and capital flows in US dollar terms, based on the IMF's methodology outlined in the fifth edition of the BoP manual.

Timing: Released on the second following month.

Seasonal/focus: Not seasonally adjusted.

Revisions: Minor revisions to previous quarters are reported together with the new figures.

Wholesale price index

Source: Instituto Nacional de Estadistica e Informatica (INEI, national statistics institute).

Description: Monthly index (1994=100), comprising 78% domestically produced items, 22% imported goods.

Timing: Usually released during the last day of the same month.

Seasonal/focus: Not seasonally adjusted. Focus is on oya and m/m series.

Revisions: None.

Comments: Not a widely watched series.

Consumer price index

Source: Instituto Nacional de Estadistica e Informatica (INEI, national statistics institute).

Description: A monthly index (Dec 2001=100) constructed from observations obtained in Lima (the capital city). Weights are based on household expenditures from a survey taken in 1994. Core inflation excludes products with highly volatile prices and is a measure of the overall trend of prices in the economy.

Composition of the CPI
% weighting (based on 1994)

Core goods and services	**68.3**
Goods	41.8
Non-processed foods	1.8
Processed foods	16.7
Beverages	2.3
Textiles	5.5
Footwear	2.0
Other goods	13.4
Services	**26.6**
Restaurants	12.0
Education	5.1
Other personal services	3.5
Rent	2.3
Health	1.3
Other services	2.4
Non-core inflation	**31.7**
Foodstuffs	14.8
Fuel	3.9
Transportation	8.4
Public services	4.6
Consumer prices	**100.0**

Source: National Statistics Institute (INEI)

Timing: Usually released during the last day of the same month.

Seasonal/focus: Not seasonally adjusted. Focus is on oya and monthly changes.

Revisions: None.

Comments: Since the central bank has an inflation-targeting policy regime based on the behavior of this index, monthly inflation is a good predictor of monetary policy. The INEI also publishes a national inflation number, with a breakdown by type of goods and services, but these nationwide figures are not released until the 15th of the following month. Because of the reporting lag, it is not closely watched by the market and it is not the central bank's targeted measure, the nationwide index gets little attention.

Central government fiscal balance

Source: Central Bank of Peru (BCRP).

Description: Monthly balance of the overall public sector. Revenues are measured on a cash basis, while expenditures are measured on an accrued basis. The data are reported both in nominal terms and real terms.

Timing: Released by the second half of the second following month.

Seasonal/focus: Not seasonally adjusted. Focus is on both the primary balance and the overall balance.

Revisions: Frequent.

Comments: A widely watched series under the current IMF program.

International reserves

Source: Central bank of Peru (BCRP).

Description: Daily international reserves position of the central bank in US dollar terms.

Timing: Daily series, released with one-week lag.

Seasonal/focus: Not seasonally adjusted. Focus is on the total level of reserves and reserve changes.

Revisions: None.

Comments: An important measure of the monetary authority's ability to deal with currency shocks: i.e., to intervene in the fx market to maintain a stable exchange rate.

JPMorgan Chase Bank, New York
Jimena Esponda (1-212) 834-7316
jimena.esponda@jpmorgan.com

Venezuela

The monthly data cycle

Following month	Second following month	Third following month
First half	**First half**	**First half**
Consumer price index	Unemployment rate	
Wholesale price index		
Second half	**Second half**	**Second half**

The quarterly data cycle

Following month	Second following month	Third following month
	Real GDP	
	Balance of payments	

The daily data cycle

Following day	Second following day	Third following day
		International reserves

JPMorgan Chase Bank, New York
Jimena Esponda (1-212) 834-7316
jimena.esponda@jpmorgan.com

Gross domestic product

Source: Central Bank of Venezuela (BCV).

Description: The BCV reports quarterly and annual national accounts, both in nominal terms and in 1984 prices. A breakdown by expenditure and output components is included in the report.

Timing: Released during the second half of the second following month.

Seasonal/focus: Reported both unadjusted and seasonally adjusted. Thus, focus is on both yearly and quarterly changes.

Revisions: Subject to revisions.

Comments: Closely followed by the market, specially during an economic crisis. The market pays special attention to the oil sector, which accounts for 30% of total GDP.

GDP composition in 2001
% of total (in constant prices of 1984)

GDP	**100**
Oil	**26.4**
Non-oil	**70.8**
Agriculture	4.9
Mining	0.9
Electricity, gas and water	1.9
Manufacturing	14.2
Construction	5.6
Commerce	8.2
Restaurants and hotels	2.4
Transport and communicatior	6.6
Financial sector	1.1
Real Estate	8.1
Other services	16.9

Source: Central Bank of Venezuela

GDP by type of expenditure in 2001
% of total

GDP	100
Consumption	65
Private	55
Public	10
Investment	19
Fixed investment	15
Change in inventory	4
Net exports	16

Source: Central Bank of Venezuela

Unemployment

Source: Oficina Central de Estadistica e Informatica (OCEI, National Statistics Institute).

Description: Monthly unemployment rate. Underemployment rates also available.

Timing: Released during the first half of the second following month.

Seasonal/focus: Not seasonally adjusted.

Revisions: None.

Comments: The official unemployment rate is closely followed by the market due to its political significance. However, privately measured unemployment rates are usually much higher than the official rate.

Balance of payments

Source: Central Bank of Venezuela (BCV).

Description: Quarterly report of international current and capital flows in US dollar terms, based on IMF methodology.

Timing: Released on the second following month.

Seasonal/focus: Not seasonally adjusted.

Revisions: Minor revisions to previous quarters are reported together with the new quarterly figures.

Comments: The report is closely watched by the market, as it provides an overview of foreign and local investors' sentiment toward the country, as reflected in capital inflows and outflows. Also, at present (in early 2004) it is a good measure of the government's success in enforcing capital controls in place since January 2003.

Wholesale price index

Source: Central Bank of Venezuela (BCV).

Description: Monthly index (1997=100) comprises 74.7% domestically produced products, the remainder imported goods. It includes a breakdown by type of good.

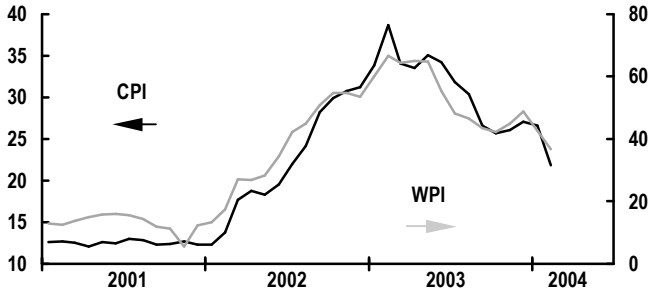
Timing: Usually released during the first half of the following month.

Seasonal/focus: Not seasonally adjusted. Focus is on oya and m/m series.

Revisions: None.

Comments: This is a widely watched series. It reflects the high passthrough from depreciation to inflation.

Wholesale and consumer prices
%oya, both scales



JPMorgan Chase Bank, New York
Jimena Esponda (1-212) 834-7316
jimena.esponda@jpmorgan.com

Consumer prices

Source: Central bank of Venezuela (BCV).

Description: Monthly index (Dec 1997=100) constructed from observations obtained in Caracas (the capital city) and five other cities. No official core inflation measure is presented

Timing: Usually released during the first week of the following month.

Seasonal/focus: Not seasonally adjusted. Focus is on both oya and monthly changes.

Revisions: None.

Composition of the CPI

% weighting

Total	**100.0**
Food, non-alcoholic beverages	22.9
Alcoholic beverages, cigarettes	1.5
Clothing and footwear	6.5
Apartment rental	15.1
Utilities	3.5
Appliances	5.5
Health	4.2
Transportation	13.3
Communication	5.2
Entertainment	5.1
Education	4.8
Restaurants and hotels	6.1
Other	6.2

Source: Central Bank of Venezuela

Comments: The government of Venezuela imposed a fixed exchange rate in January 2003, and has repeatedly said that it wants to keep inflation under control. Since there is a high passthrough from depreciation to inflation, the market closely follows inflation to predict possible movements in the fx rate.

International reserves

Source: Central Bank of Venezuela (BCV).

Description: Daily international reserves position of the central bank in US dollar terms, including deposits at the Macroeconomic Stabilization Fund (FIEM).

Timing: Released with a two-day lag.

Seasonal/focus: Not seasonally adjusted. Focus is on the total level of reserves and the level of deposits at the FIEM.

Revisions: None.

Comments: It is an important measure at it predicts the monetary authority's ability to deal with currency shocks. another measure, closely watched by international investors, is the external debt to international reserves ratio which predicts the government's ability to remain current on debt service. International reserves soared during 2003 after the government imposed strict capital controls in January 2003.

Total gross international reserves including FIEM

US$ billion

JPMorgan Chase Bank, London
Malcolm Barr (44-20) 7777 1080
malcolm.barr@jpmorgan.com

United Kingdom

The monthly data cycle

Same month	Following month	Second following month
	First Third	**First third**
	Manufacturing PMI Construction PMI Services PMI Nationwide House prices Halifax House prices New car registrations	Trade balance
	Middle third	**Middle third**
	Consumer price indices Labour market statistics Money supply M4	RICS housing survey
Final third	**Final third**	**Final third**
Consumer confidence CBI monthly industrial trends survey	Retail sales Lending to individuals Public sector finances	

The quarterly data cycle

Following month	Second following month	Third following month
GDP (preliminary estimate) BCC quarterly survey	GDP (second estimate) Land registry report	GDP (final estimate) Balance of payments

JPMorgan Chase Bank, London
Malcolm Barr (44-20) 7777 1080
malcolm.barr@jpmorgan.com

Gross domestic product

Source: UK Office for National Statistics (ONS)

Description: The preliminary quarterly estimate for gross domestic product is based predominantly on indications of output during the quarter. The estimate of the index of output of the producing industries for the first two months of the quarter is used to generate an estimate of quarterly IP. Retail sales estimates for the three months of the quarter are employed to help estimate services output, together with limited information on the output of the rest of the economy. The second estimate of GDP includes the expenditure and income based breakdown of GDP. The "final" estimate of GDP provides full detail on quarterly national accounts, although the data are subject to ongoing revision. The ONS assumes that the output measure of GDP is the most reliable at high frequency, adjusting the expenditure and income measures toward GDP as calculated via output for the first two years of the existence of the data.

Timing: The preliminary release is typically six weeks after the end of the reference quarter; the second release follows one month later, and the final release a month after that.

Seasonal/focus: The data are published in seasonally adjusted form, and are compiled in accordance with the methodology set out in ESA93. The focus is on the most recent sequence of quarterly growth rates (and the most recent quarter in particular) as gauge of the momentum in output growth.

Revisions: The data are subject to an ongoing process of revision, which extends well beyond the publication of the final release.

Comments: Closely followed, especially since the UK's output-based GDP report for any particular quarter is the first to be published in the OECD.

Index of production

Source: UK Office for National Statistics (ONS)

Description: The Index of Production (IoP) is a monthly gauge of output in the production industries, comprising manufacturing, mining and quarrying, and electricity, gas, and water supply. The Monthly Production Inquiry (MPI) is the main source of information for calculating the indices for the manufacturing sector, which accounts for just over 80% of total industrial production.

Timing: Typically 26 working days, but no later than six weeks, after the end of the reference month.

Seasonal/focus: The data are made available in both seasonally adjusted and unadjusted form. Focus is on the behavior of the manufacturing component, which tends to be less noisy than overall production.

Revisions: Revisions are frequent, partly reflecting late returns to the monthly inquiry.

Comments: The monthly index of production feeds directly into the calculation of output-based GDP, accounting for around 25% of GDP by output.

CIPS purchasing managers index: manufacturing

Source: NTC research and the Chartered Institute of Pur chasing and supply

Description: The PMI is a monthly survey of manufacturing activity modelled on the comparable US ISM survey. The overall index is a key gauge of manufacturing activity in the UK. The report itself is based on data compiled from monthly responses to questionnaires sent out to purchasing executives in 620 industrial companies. The sample is selected such that responses relate solely to operations with the UK (companies that cannot distinguish between UK and overseas operations are excluded).

Timing: The questionnaires are sent out in the middle of the month prior to the reference month. At least 50% of replies will normally have been received by the middle of the reference month, and all replies should have been received by a week later. The report is compiled in the final week of the reference month and published on the first working day of the month following.

Seasonal/focus: The sub-indices are provided both unadjusted and seasonally adjusted. The seasonally adjusted headline index is the series that is most closely watched.

Revisions: Revisions can occur on a monthly basis;, these will go back over 2 or 3 months at most and are generally small.

Comments: Three purchasing managers' indices are produced covering the manufacturing, services and construction sectors of the economy. They are seen as key gauges with regards to activity in their respective sectors of the economy. However, the tracking ability of the composite PMI—a GDP-weighted aggregation of the sectoral survey—appears to come in spite of, not because of, the performance of the PMIs at a sectoral level.

JPMorgan Chase Bank, London
Malcolm Barr (44-20) 7777 1080
malcolm.barr@jpmorgan.com

CIPS purchasing managers index: construction

Source: NTC research and the Chartered Institute of Purchasing and supply

Description: The PMI is a monthly survey of construction activity. The report itself is based on data compiled from monthly responses to questionnaires sent out to 160 business executives in construction firms. The results are put together in a similar fashion to the PMI manufacturing. However the headline indicator is a separate question on the level of construction activity, rather than an amalgamation of some of the individual components in the survey.

Timing: See PMI manufacturing for survey timings. The official publication of the report is on the second working day of the month following the reference month.

Seasonal/focus: Same as the PMI manufacturing.

Revisions: Same as the PMI manufacturing.

CIPS purchasing managers index: services

Source: NTC research and the Chartered Institute of Purchasing and supply

Description: The monthly services survey covers the areas of transport and communications, financial intermediation, business services, personal services, computing and IT, and hotels and restaurants. The report is based on data compiled from monthly responses to questionnaires sent to over 700 firms covering these sectors. Each response is weighted each month according to the size of the company to which the questionnaire refers and the contribution to total service sector output accounted for by the subsector to which that company belongs. The results are put together in a similar fashion to the PMI manufacturing. As with the construction survey, however, the headline indicator is a separate question on the level of services activity rather than an amalgamation of some individual components in the survey.

Timing: See PMI manufacturing for survey timings. The official publication of the report is on the third working day of the month following the reference month.

Seasonal/focus: See PMI manufacturing

Revisions: See PMI manufacturing.

BCC quarterly economic survey

Source: British Chambers of Commerce

Description: A quarterly survey covering over 6,500 companies employing 750,000 people throughout the UK. Companies are surveyed by postal questionnaire during the final month of the reference quarter. In the manufacturing sector, 2,250 firms employing 230,000 are surveyed. compared to 4,300 companies with 511,000 employees in the service sector. The sample includes 170 large companies (with more than 500 employees).

Responses are weighted according to the actual distribution of companies by size within each region, and each region is similarly weighted within the national aggregates to ensure a representative picture of UK commerce and industry. Balance figures are determined by subtracting the percentage of companies reporting decreases from the percentage reporting increases for each answer. Questions refer to movements over the next/past three months in: domestic sales, exports, employment, investment, overall confidence, and capacity utilization.

Timing: Usually published around the middle of the month following the reference quarter, just before the release of preliminary GDP.

Seasonal/focus: The results are unadjusted, although some questions ask respondents to exclude seasonal variation.

Revisions: None.

Comments: Much of the data covered in the report are already covered on a higher frequency by various PMI and CBI surveys. However it can be a useful cross-check of trends.

Labor market statistics

Sources: UK Office for National Statistics (ONS)

Description: The release contains monthly and quarterly detail on employment, unemployment, and other labor market variables drawn from a number of sources.

There are two different versions of the *unemployment* data. The first and more timely measure is the claimant count—the number of people actively seeking work who are claiming unemployment-related benefits on one particular day each month (usually the second Thursday). The second, less timely measure of unemployment is drawn from the Labour Force Survey (LFS). This survey, which employs ILO definitions of employment versus unemployment, is conducted continuously throughout the year. In any three-month period, 120,000 people age 16 and over in around 60,000 households are interviewed, mostly face to face. The results are published monthly for the average of three consecutive months.

JPMorgan Chase Bank, London
Malcolm Barr (44-20) 7777 1080
malcolm.barr@jpmorgan.com

Employment is also covered using two approaches. The measure drawn from the labor force survey gives the number of individuals age 16 and over who meet the ILO definition of employed. The work force jobs measure collects data on the number of jobs, mainly through postal surveys of employers. The work force jobs measure also provides detail with on the sectoral breakdown of employment.

The *average earnings* index is the key indicator of how fast wages and salaries are growing in the economy, and is constructed independently from its own monthly survey. This survey collects information from a sample of UK firms covering the wage bill for some nine million employees. Average earnings are defined as the total wage bill divided by the total number of employees paid (this includes those on strike or temporarily absent from work).

Timing: The data sourced from the labor force survey (average earnings, employment, and hours worked) are usually published with a lag of around nine weeks from the end of the reference period. The claimant count unemployment data are more timely, with a lag of around four weeks. Data for work force jobs, productivity, and unit wage costs are published quarterly, as part of the report for the final month of the reference quarter.

Seasonal/focus: The labor market data are provided in seasonally adjusted form. The numbers most focused on tend to be the monthly change in the numbers of unemployed (claimant count), the unemployment rate (both claimant count and LFS), and the year-on-year change in average earnings.

Comments: The wage bill can be volatile due to the timing of pay settlements and bonuses, so the Department of Employment produces a smoothed (over three months) version referred to as the "headline" rate of earnings. Monthly movements in claimant count unemployment are regarded as by the ONS as the most timely barometer of overall labor market conditions.

Retail sales

Source: UK Office for National Statistics (ONS)

Description: The monthly indices of retail sales give an early indication of the volume and value of consumer spending. They are compiled from the inquiry into retail sales, a monthly sample survey (covering either a four- or five-week period) carried out by the ONS on 5,000 businesses in the UK, including all large businesses and a representative sample of smaller firms. The press release has indices of both value and volume in both seasonally adjusted and unadjusted form . Subcategories published cover food, nonfood, clothing and footwear, household goods, nonstore retailing and repair, and other nonfood stores. Each standard industrial classification category of retail sales incorporates a price deflator, based on the RPI, which is used to convert value estimates into a volume series.

Timing: Usually published on the Thursday three weeks after the end of the month to which they refer.

Seasonal/focus: The data are available both in unadjusted and seasonally adjusted form.

Revisions: Revisions can occur to the previous month's estimates, as all of the sample survey results may not have been received by the time the initial estimate will have been compiled; revisions can be substantial.

Comments: Focus is mainly on month on month and oya changes in the volume indices. Retail sales are a key barometer of household spending. Earlier indicators of retail sales also are given by the British Retail Consortium's index of retail sales and the CBI's monthly survey of distributive trades.

New car registrations

Source: Society of Motor Manufacturers and Traders (SMMT)

Description: A monthly report of the number of new car registrations, with commentary from the SMMT on the outlook for car sales in the year ahead.

Timing: Typically released in the first week following the reference month.

Seasonal/focus: The data are published in unadjusted form; there are pronounced seasonal effects, as new registrations tend to be bunched in the two months of the year in which the new registration numbers become available.

Revisions: With rare exceptions, the data are final on first release.

Comments: Followed as the first monthly indicator of consumer spending, although volatility and lack of seasonal adjustment make these data hard to interpret.

CBI Survey of Distributive Trades

Source: Confederation of British Industry

JPMorgan Chase Bank, London
Malcolm Barr (44-20) 7777 1080
malcolm.barr@jpmorgan.com

Description: The CBI's survey of "high street" activity goes back to 1983. It has a core of around 250 respondents, covering some 20,000 UK retail outlets. The monthly survey asks respondents to compare their actual and expected levels of sales, orders to suppliers, and stocks on hand with those of a year earlier. The results are reported as the net percentage balance of positive less negative responses. Once a quarter the survey is expanded to include questions on selling prices, employment, and investment.

Timing: Questionnaires are sent out in the first week of the month, with all responses due by the last week of the month. The data are released between five and eight working days after the end of the reference month or quarter.

Seasonal/focus: Data are not seasonally adjusted, and respondents are asked to exclude normal seasonal fluctuations in their answers. Comparisons are against levels a year earlier. The focus is normally on the balance of retailers reporting increased sales and expected sales volumes.

Revisions: The data are final on first release.

Comments: Though the linkages between CBI and official ONS data are not particularly close on a monthly basis, the CBI data provide an early guide to the trend in retail sales.

Consumer confidence barometer

Source: Martin Hamblin Gfk

Description: This monthly survey of consumer sentiment has been conducted in the UK since June 1995. The surveys asks 12 questions on a monthly basis (there are an additional three questions on a quarterly basis). The topics covered are: personal finances (past and future), general economic situation (past and future), inflation (current and future), unemployment, current purchasing climate, consumer spending and saving (current climate, saving intention, current status). Once a quarter questions are asked about car purchasing, home purchasing, and home improvements.

For the above questions, there are six possible answers. Two ("Do not know" and "No change") are considered neutral and not counted in the survey results. There are two positive responses (" improved" or "considerably improved") and their two negative counterparts. For all questions, the index is based on the prevalence of positive versus negative answers, with the extreme ("considerably") responses given double weight.

Timing: The survey is usually conducted over a period of about three weeks, from the end of the prior month to about the 20th day of the reference month. The consumer confidence barometer is published on the penultimate working day of the reference month.

Seasonal/focus: Not seasonally adjusted. Main focus is on the headline index, which is calculated using the average of responses on: personal finances (past and next 12 months), general economy (past and next 12 months), and current purchasing environment.

Revisions: Small revisions are made to the previous month's numbers.

International trade

Source: UK Office for National Statistics (ONS)

Description: Monthly statistics of UK trade in goods are derived mainly from data provided by HM customs and excise. UK goods trade with countries outside the EU are compiled from declarations made to HM customs and excise while goods trade with EU member states are compiled from Intrastat returns sent by traders or their agents. (Intrastat is a communitywide system linked to the collection of VAT; it covers approximately 97.5% of the value of goods trade.) Statistics on services such as international transport, travel, and financial and business services are derived principally from surveys conducted by the ONS. The press release provides further detail on goods trade including value, volume, and price indices together with a limited breakdown by source/destination and commodity.

Timing: Released within 40 days after the reference month.

Seasonal/focus: Most of the data are seasonally adjusted.

Revisions: There can sometimes be large revisions to the back data, particularly relating to adjustments for fraud and changes to customs reporting processes.

Comments: To gauge the trend in merchandise trade it is often better to focus on exports and imports excluding oil and "erratics," as both of these can be volatile on a monthly basis. ("Erratics" include ships, aircraft, precious stones, and silver.)

Balance of payments

Source: UK Office for National Statistics (ONS)

Description: The quarterly balance of payment report measures the sterling value of economic transactions between UK residents and the rest of the world, following IMF sanctioned reporting standards. It includes exports and imports of goods and services (see above), income flows (including

JPMorgan Chase Bank, London
Malcolm Barr (44-20) 7777 1080
malcolm.barr@jpmorgan.com

dividends and interest), financial flows (such as investments in shares, debt securities, and loans) and transfers. Transfers are offsetting entries to any one-sided transaction already listed, such as foreign aid and funds brought by migrants to the UK.

Timing: The data are released towards the end of the final month of the quarter following the reference quarter.

Seasonal/focus: The current account data are seasonally adjusted. Focus is typically on the magnitude of the overall current account balance in each quarter.

Revisions: There are of frequent revisions to the data, reflecting both revisions to merchandise trade and to other transactions.

Consumer price indices

Source: UK Office for National Statistics (ONS)

Description: The monthly Consumer Price Index (CPI) measures the average change in prices of goods and services bought for the purposes of consumption by the vast majority of households in the UK. On a specific day in the month (usually the second Tuesday), some 130,000 separate prices are collected for more than 650 goods and services at over 20,000 outlets nationwide. The index itself is an annually chain linked Laspeyres index, compiled using the harmonized methodology developed for the purposes of measuring inflation across the EU. For wage bargaining and other purposes, the Retail Price Index (RPI) is often still used. Unlike the CPI, this includes owner-occupiers housing costs, council tax, and mortgage interest payments. Furthermore, the RPI also uses a traditional arithmetic mean when averaging price observations, rather than the geometric mean used in CPI, which tends to bias RPI inflation upwards by around 0.5%.

Timing: Normally released the second or third Tuesday after the end of the reference month.

Seasonal/focus: There is no seasonal adjustment so the main focus is on year on year changes. Seasonality is pronounced in fresh food prices, and due to tax changes following the budget, and sales in January and July.

Revisions: There are no regular revisions. Any changes in the weights used and/or in the basket of goods and services are introduced once a year in the January release.

Comments: The CPI is the key barometer for monetary policy purposes, targeted at 2%. The potential inclusion of housing costs in the CPI is currently under review.

Producer prices

Source: UK Office for National Statistics (ONS)

Description: The monthly producer price indices measure the price movement of goods bought and sold by UK manufacturers. Prices are collected once a month via a postal survey, sent to around 3,000 manufacturers giving an approximate coverage of about 45% of manufacturing industry. Nine thousand price quotes are obtained covering approximately 980 products. Indices are presented for both input and output prices. The input PPIs measure the prices of materials and fuel bought for processing; output prices are those that responding manufacturers charge for final goods at the time of order.

Timing: The press release generally comes 26 working days, and no later than six weeks, after the reference month.

Seasonal/focus: The data are made available in both seasonally adjusted and unadjusted form. Seasonality is more pronounced in the input prices series. The focus tends to be on seasonally adjusted input prices, but seasonally unadjusted output prices.

Revisions: Small revisions can occur to the back data up to three months after the official publication.

House price indices

Sources: Halifax and Nationwide building societies, Office of the Deputy Prime Minister, HM Land registry.

Description: The monthly Halifax house price indices were introduced in 1983, based on records of the houses on which the organization has made a mortgage offer in each time period. The Halifax is the UK's largest mortgage lender and after editing the indices will be based on around 13,500 house price observations per month.

The Nationwide produces the longest unbroken run of house price data with its headline quarterly index stretching back to 1952. The monthly Nationwide indices have been produced since 1991. The Nationwide survey is smaller than the Halifax: the building society does only about 40% as much mortgage business as Halifax each year. Both the Halifax and Nationwide measures uses regression analysis to create quality-adjusted house prices, applying estimated coefficients to the buyer's assessment of the specific location and physical attributes of the individual house.

The Office of the Deputy Prime Minister (ODPM) produces a quarterly house price index, and has recently introduced a monthly index, based on a weighted average of prices for a standard mix of dwellings. The index is based

JPMorgan Chase Bank, London
Malcolm Barr (44-20) 7777 1080
malcolm.barr@jpmorgan.com

on a five percent sample survey of all lenders' mortgages in the UK. (This survey is known as the Survey of Mortgages Lenders or SML.) The sample size ranges from 26,000 to 36,000 cases per year.

The Land Registry compiles its quarterly figures from data sent by conveyancers and solicitors on every completed property sale in England and Wales (around 100,000 transactions a month). However the Registry data are not nationwide (only England and Wales), and are based on unadjusted averages.

Timing: Release of the Halifax and Nationwide indices is generally in the first week of the month after the reference month. The Land Registry press release is usually published in the middle of the second month following the reference quarter.

Seasonal/focus: House prices are slightly seasonal, tending to be higher in spring and summer regardless of the overall trend. The indices from the Halifax and Nationwide are seasonally adjusted; the others are not. Focus in all cases is typically on the oya rate of change.

Housing market surveys

Source: Royal Institute of Chartered Surveyors (RICS)

Description: A monthly survey of RICS-member residential estate agencies in England and Wales. Unlike the quantitative house price indices, the RICS report is qualitative in nature, aggregating responses in ten different regions.

The longest running series in the report relate to price changes over the past three months, and average stocks and sales per chartered surveyor. These three series date back to January 1978. The monthly net prices balance measures the difference between the percentage of surveyors reporting a rise or a fall in prices over a three-month period. The sales data record the number of sales over the past three months, with sales defined at the point when contracts have been exchanged. The stock of properties on surveyors' books records dwellings up for sale at time when the survey is completed, for which contracts have not been exchanged. The report also includes information on buyer enquiries and new instructions. All data are available on both a national and a regional basis.

Timing: Released in the middle of the month following the reference month.

Seasonal/focus: Data are provided in both seasonally adjusted and unadjusted form.

Comments: Although the main market focus is on the overall prices balance, the relationship between this and actual house price changes is not particularly tight. A key indicator of future price developments is the ratio of completed property sales to stocks of unsold properties.

Money supply

Source: Bank of England

Description: Two monthly measures of the money supply are published. M0 (or "narrow money") is defined as all sterling notes and coins in circulation, plus banks' operational deposits at the Bank of England. M4 (or "broad money") comprises holdings by the "M4 private sector" (private entities other than monetary and financial institutions, or MFI) of notes and coin, together with their sterling deposits at monetary and financial institutions in the UK (including CDs and other paper issued by MFIs of not more than five years original maturity).

Timing: Data for most components of M0 are published on a weekly basis. The provisional estimate for the monthly average M0 is published on the third working day after the last Wednesday of the month. The final outturn for the month is published on the third working day after the first Wednesday of the following month. A provisional estimate of M4 and its components is published on the 14th working day after the end of the reference month. The final outturn is published on the 21st working day after the month.

Seasonal/focus: Both M0 and M4 are published in seasonally adjusted form. Aside from the rates of change in M0 and M4, markets focus on the change in "M4 lending," that is lending by monetary and financial institutions to the M4 private sector. While M0 and M4 are measures of the liabilities of the banking system, M4 lending is a counterpart drawn from the assets side of MFI balance sheets.

Revisions: Typically revisions to the provisional data are relatively small.

Comments: Though the MPC has spoken of "a reasonably close relationship between narrow money growth and growth in the value of retail sales in the long run," the relationship is of little use for short term forecasting or for predicting monetary policy. The relationship between M4 and measures of spending growth is similarly patchy.

JPMorgan Chase Bank, London
Malcolm Barr (44-20) 7777 1080
malcolm.barr@jpmorgan.com

Consumer credit

Source: Bank of England

Description: The monthly report on consumer credit, secured lending, and mortgage approvals measures all sterling borrowing by the UK household sector (excluding unincorporated businesses and nonprofit institutions). Total lending is split into lending secured against dwellings, and consumer credit. The press release also reports the number of newly approved mortgages for house purchase.

Timing: The data are typically published alongside the final release of the M4 data, 21 working days after the end of the reference month.

Seasonal/focus: The data are seasonally adjusted. Focus is on the monthly flows of lending in billions of sterling.

Revisions: Revisions to the data are usually small, although they tend to be larger around turning points in the data.

Comments: The linkages between borrowing and nominal expenditure are not particularly close at high frequency. The number of mortgage approvals contains some information as a leading indicator of trends in the housing market.

Public sector net cash requirement (PSNCR)

Source: Office for National Statistics

Description: The monthly release on public finances documents expenditure and income of the central government, local governments, and public corporations. Within the central government sector, a basic breakdown of income and expenditure is also given. The PSNCR measures the public sector's need to raise finance in any given month.

Timing: The data are typically published between the 20th and 23rd of the month following the reference month.

Seasonal/focus: The data are not seasonally adjusted; hence it is common to compare any particular month with outcomes in the same month of the prior year.

Revisions: As the cash and borrowing requirements are a residual from two much larger magnitudes (total public sector income and expenditure), revisions can be substantial.

Comments: The market's focus on the PSNCR is partly a hangover from the era of monetary targeting, when much emphasis was placed on the linkage between the PSNCR and measures of money supply. The PSNCR is influenced by the exact timing of receipts and expenditure. The public sector net borrowing requirement, which seeks to control for distortions arising from timing changes, is a cleaner measure of the underlying trend in borrowing.

JPMorgan Chase Bank, London
Malcolm Barr (44-20) 7777 1080
malcolm.barr@jpmorgan.com

JPMorgan Chase Bank, London
Malcolm Barr (44-20) 7777-1080
malcolm.barr@jpmorgan.com

Switzerland

The monthly data cycle

Same month	Following month	Second following month
Last working day	**First working day**	**Around 10th**
Consumer prices	Purchasing mgrs. survey	Retail sales
	First week	
	Unemployment	
	Second/third week	
	Producer and import price index	
	Third/last week	
	Merchandise trade	Monetary aggregates
	Last week	
	KOF leading indicator	

The quarterly data cycle

Last month of quarter	Second following month	Third/fourth following month
First/second week	**First week**	**Third month:**
Gross domestic product	Consumer confidence	
	Last week	**Fourth week**
	Employment	Industrial production
		Fourth month:
		First week
		Balance of payments

JPMorgan Chase Bank, London
Malcolm Barr (44-20) 7777-1080
malcolm.barr@jpmorgan.com

Gross domestic product

Source: State Secretariat for Economic Affairs.

Description: Quarterly output-based real GDP is estimated using three time series as proxies for output as a whole: full-time equivalent work force employment, employment prospects in the service sector, and real export volumes. The change in inventories acts as a residual in balancing the output-based estimate for GDP with the separately estimated expenditure components. The press release reports the quarterly growth rates of GDP and its expenditure components alongside a full set of deflators.

Timing: The official timing for the release of the data is 11 weeks after the end of the reference quarter, except for the second quarter, which is released 12 weeks (and no later than one quarter) after the reference quarter.

Seasonal/focus: The data are released in both unadjusted and seasonally adjusted forms, but the focus is on the seasonally adjusted data.

Revisions: The data are provisional when first released, and the unadjusted data are revised twice a year. The seasonally adjusted data are subject to ongoing revision, although revisions are typically not published independently of the quarterly release.

Comments: The headline GDP numbers tend to be substantially revised over a series of releases. The expenditure components of GDP are even more revision-prone, and should be interpreted cautiously on first release.

Industrial production and orders

Source: Federal Statistical Office.

Description: A quarterly report based on data collected via questionnaire from a sample of businesses that represent one-third of total output. Ten percent of the production of manufacturing industries is measured by physical quantities and 90% by deflated turnover. The weighting system for the production index is based on value added at factor costs. The press release provides indices for production, new orders received, stocks of orders, and turnover.

Timing: The data are reported within 90 days of the reference quarter. As most companies in Switzerland are either small or medium-sized, the statistics office would find it difficult to collate results on a monthly basis.

Seasonal/focus: The data are not seasonally adjusted. However, a calendar adjustment takes into account the number of working days in the quarter.

Revisions: The data are subject to revisions. Recent industrial production releases have undergone large-scale revisions to the back data which have brought into doubt the reliability of the numbers on first release.

Comments: The quarterly data are typically released after the GDP data for the quarter, which diminishes the importance of the release to financial markets.

Purchasing managers index: manufacturing

Source: Credit Suisse Investment Bank and the Swiss Association of Purchasing and Materials Management.

Description: The PMI is a survey of manufacturing activity modelled on the comparable US ISM survey. The overall index is a key gauge of manufacturing activity in Switzerland, given its timeliness and the fact that it is less prone to revision than other indicators. Each month over 200 purchasing managers at Swiss industrial companies are asked about their performance in the current month compared to the previous month.

Timing: The surveys are started on the 25th of the reference month, generally completed by the 30th of the reference month, and published on the first working day of the month following the reference month.

Seasonal/focus: The subindices are provided both unadjusted and seasonally adjusted. The seasonally adjusted headline index is the series that is closely watched.

Revisions: Revisions can occur on a monthly basis, these will tend to go back over 2 or 3 months, at most.

KOF leading indicator

Source: Swiss Institute for Business Cycle Research (KOF/ETH).

Description: The KOF institute sponsors a number of business surveys, namely a monthly industry survey, a monthly retail trade survey, and a quarterly wholesale activity survey. These surveys, along with other information, are used to construct the monthly KOF composite leading indicator, which aims to track GDP growth and provide indications of major cyclical turning points about 8 months in advance. In practice, the indicator appears to give a reading of the behavior of GDP growth in the quarter of the reference month.

The industrial survey is the largest, covering around 1400 firms each month. The questionnaires are sent out at the beginning of the month after the reference month and need to be returned by the 10th day of that month. Most of the questions are qualitative and the results are reported as the per-

JPMorgan Chase Bank, London
Malcolm Barr (44-20) 7777-1080
malcolm.barr@jpmorgan.com

cent balance between "optimistic" and "pessimistic" responses. In addition to the monthly industry survey, the KOF also conducts a more exhaustive quarterly survey, which includes information on capacity utilization.

The composite leading indicator has six components: the change in manufacturers' orders inflow compared to the previous year's month; the change in manufacturers' order backlog over the previous month; manufacturers' expected purchase of intermediate and raw materials within the next 3 months; the judgment of stocks in wholesale business (quarterly series); households' judgments of their financial situation in the next year (from SECO's quarterly survey of consumer confidence: see below); and the quantitative year-to-year change in real orders' backlog in the construction sector (quarterly series produced by SBV/SEE). The three quarterly components of the leading indicator are introduced into the calculations for the KOF leading indicator for the reference month after the end of that quarter.

Timing: The leading indicator is released four weeks after the reference month. The monthly business surveys all have the same release schedule as the leading indicator.

Seasonal/focus: The six component series of the leading indicator are seasonally adjusted before being combined (using econometric smoothing methods) into the composite leading indicator.

Revisions: Owing to the trend-cycle smoothing process applied to each of the series, as each new data point is added, the original series can extensively be revised.

Comments: The fact that the leading indicator is so revision-prone diminishes its value as a high-frequency guide to the magnitude of quarterly GDP growth, but the signal on direction from the data is still important.

Unemployment

Source: State Secretariat for Economic Affairs (SECO).

Description: A monthly report, constructed to be broadly consistent with ILO standards, which define unemployment as all persons who have no job, are available for work, and are seeking employment. The data cover all job seekers, including foreign nationals residing in Switzerland, between the ages of 15 and 65, and are drawn from the registers of regional placement offices of the Swiss local authorities. The data refer to registrations as of month end. The labor force estimate is based on the decennial population census.

Timing: The data are released is in the first week of the month after the reference month.

Seasonal/focus: The data are provided in both unadjusted and seasonally adjusted form. The seasonally adjusted change in unemployment is the key monthly indicator of labor market conditions.

Revisions: The unadjusted data are not subject to revision.

Employment

Source: Federal Statistical Office

Description: Two quarterly employment measures are reported: *work force jobs* (Emplois), and the more detailed *persons in employment* (Actifs occupes). The *work force jobs* measure covers paid employees working at least 6 hours per week. The *persons in employment* measure also includes unpaid workers (for example, in family businesses). It includes employees, self-employed, part-time workers, apprentices, and business owners. The data are obtained from a survey sent out via mail, and refer to payrolls on the last working day of the quarter. The survey covers approximately 14% of enterprises and 56% of those employed.

Timing: The press release is published approximately two months after the end of the reference quarter, towards the end of the month.

Seasonal/focus: The data are not seasonally adjusted.

Revisions: Revisions to prior data tend to be small.

Comments: The figure that is most focused on is the headline oya growth in *persons in employment*. The employment numbers are inputs into the calculation of GDP. Since three out of the four indicators used to formulate headline GDP number are contained in this release, it should provide a good preview of the GDP. However, on a quarter by quarter basis, the linkages between GDP growth and the employment statistics are not particularly tight.

Retail trade

Source: Federal Statistical Office

Description: A monthly report of the value and volume of all goods sold to final consumers. The Swiss statistics office introduced a comprehensive revision of the retail sales statistics in the first quarter of 2001.

Timing: The data are generally released about 40 days after the reference month. The official deadline is the 15th of the second month after the reference month.

JPMorgan Chase Bank, London
Malcolm Barr (44-20) 7777-1080
malcolm.barr@jpmorgan.com

Seasonal/focus: The data are not seasonally adjusted, although data adjusted for the number of sales-days are provided. There are plans to produce a seasonally adjusted retail sales series in the future.

Comments: While they are used in compiling the national accounts, these data have not proved an accurate guide to overall consumption trends; hence JPMorgan does not tend to track them on a monthly basis.

Consumer confidence

Source: State Secretariat for Economic Affairs (SECO)

Description: A quarterly survey of 1,100 consumers, consulted at random, by telephone, between the first and the third week of the quarter. Questions include opinions on recent and future behavior of: the economy, price developments, job security, personal financial situation, savings, and purchases. Each question has 5 possible answers ("improved," "considerably improved," two corresponding negative responses, and "no change") and the indices are a balance of positive versus negative answers to each question, with the extremes counted double. The headline consumer confidence index is an average of three component indices: for recent economic conditions, and recent and future personal finances.

Timing: The release date is usually in the first week of the second month of the following quarter.

Seasonal/focus: The data are seasonally adjusted.

Revisions: The data are final on first release.

Merchandise trade

Source: Directorate General of Swiss Customs

Description: A monthly report of exports and imports of goods based on customs declarations, presented both in value terms and in terms of quantities based on weight. They are also broken down into categories of goods, and since November 2002, by region. The "headline" trade data exclude precious metals and gemstones, art, and antiques. Data are collected and returned to the Directorate General of Customs by the 9th working day of the following month.

Timing: Released 3-4 weeks after the reference month.

Seasonal/focus: The data are not seasonally or working-day adjusted.

Revisions: The data are provisional when first released. Revisions tend to be announced a few days prior to the subsequent monthly release.

Comments: The monthly nominal unadjusted trade data form the source data for trade and other components of the national accounts. Seasonal and working-day adjustments and deflation into volume terms for use in the calculation of GDP are carried out by SECO (not the customs office).

Balance of payments

Source: Swiss National Bank (SNB)

Description: The quarterly balance of payment statement summarizes economic transactions of Swiss residents with the rest of the world. The data are disseminated in millions of Swiss francs. In addition to trade in goods and services, the balance of payments shows transactions in financial and physical assets, net income generated abroad, and movements in official reserves.

Timing: The deadline for release of the data is one quarter after the end of the reference quarter.

Seasonal/focus: The data are not seasonally adjusted.

Revisions: The data are subject to ongoing revision which can influence the calculation of GDP.

Comments: The SNB provides SECO with an estimate of service trade for use in GDP calculations ahead of the full balance of payment release (the latter information is not made public ahead of the GDP release).

Consumer prices

Source: Federal Statistical Office

Description: Monthly consumer price indices are chain-weighted, with weights revised annually. A "core" index excludes food, energy, and seasonal product prices.

The CPI had 12 main groups, subdivided into 80 subgroups. On average 40,000 prices are collected monthly, from around 3,000 sales outlets. Price collection is carried out during the first 6 days of the month. Some major retailers have a central pricing policy and will supply prices to the SFSO via printed or electronic forms. Utilities will supply prices by printed form or telephone while mail order catalogues will be collected via mail and questionnaires. A useful breakdown between domestically produced versus imported goods and services components is also published. Subsidies and discounts are reflected in the CPI, but items such as money off coupons and loyalty cards are ignored. The majority of prices are collected monthly, but some (notably clothing and footwear and rent) are collected quarterly. The quarterly reading on clothing and footwear prices

JPMorgan Chase Bank, London
Malcolm Barr (44-20) 7777-1080
malcolm.barr@jpmorgan.com

is incorporated in the data for the first month of each quarter, the quarterly reading on rents in the second month.

Timing: Released no later than five days after the end of the reference month; usually in the last week of that month.

Seasonal/focus: Not seasonally adjusted.

Revisions: The data are final on first release. Annual reweighting typically takes place with the release for January.

Comments: Sale prices for clothing and footwear are a key source of volatility. The SNB's targets for inflation are explicitly defined with reference to the consumer price index. The increased volatility of the CPI since May 2000 has led the SNB to begin publishing its own measure of "core" inflation in its monthly bulletin. This measure strips out the 15% items with the highest and lowest changes in prices, respectively, and reports an inflation rate based on the remaining 70%. This measure has been more stable than the "core" measure published by the statistics office.

Producer and import prices

Source: Federal Statistical Office

Description: A monthly index of average prices of a specific set of products of constant quality. The index covers domestically produced items in agriculture, forestry, industry, and utilities. It includes about 1,500 items in 18 major groups. Approximately 8,500 prices are collected from about 1,600 reporting units. Prices are collected during the first 8 days of the month from monthly, quarterly, half-yearly, or yearly observations depending on the short-time pattern of price fluctuations of each product group. The prices are ex-factory gate, excluding VAT, but including specific taxes and rebates.

Prices are collected via a mail questionnaire sent out to individual establishments which is then returned to the SFSO. The SFSO also compiles a separate monthly import index (May 1993=100) for selected products analogous to those used for the PPI. A combined "producer and import index " is also published, with a weight of approximately 0.70 for the domestic PPI and 0.30 for the import price index.

Timing: Released no later than 20 days after the end of the reference month.

Seasonal/focus: The data are provided in unadjusted form. The focus is primarily on the producer price series.

Revisions: The data are final on first release.

Monetary aggregates

Source: Swiss National Bank (SNB)

Description: The monthly monetary survey is a consolidation of the SNB accounts and the accounts of all Swiss banks. The monthly aggregates are based on banks whose total assets plus fiduciary business are greater then SF150 mn. The aggregates are recorded as of the end of the reference month and defined as follows:

The monthly balance sheet also shows domestic credit to government, (covering credit to central government, cantons, and communes), domestic credit to the private sector, (including credit to nonfinancial public enterprises), and the net foreign position.

Timing: Reported within one month of the end of the reference month.

Seasonal/focus: The data are provided both seasonally adjusted and unadjusted.

Revisions: The data are provisional when first released and may be revised after cross-checks with other statistics delivered to the SNB and tests on outliers.

Monetary aggregates

M1	=	currency in circulation + demand deposits with banks + demand deposits with the postal system + transaction deposits accounts with banks.
M2	=	M1 + savings deposits (without retirement accounts).
M3	=	M2 + time deposits

JPMorgan Chase Bank, London
Malcolm Barr (44-20) 7777-1080
malcolm.barr@jpmorgan.com

JPMorgan Chase Bank, London
Pasquale Diana (44-20) 7325 0745
pasquale.m.diana@jpmorgan.com

Norway

The monthly data cycle

Same month	Following month	Second following month
	First third	**First third**
	Unemployment	Industrial production
	Around 10th	
	Consumer prices	
	Around 15th	
	Trade balance	
	Final week	
	Retail sales	

The quarterly data cycle

Following month	Second following month	Third following month
Business tendency survey		GDP
		"Economic trends for Norway"
		Financial stability report

Others

Inflation report (published three times a year)

JPMorgan Chase Bank, London
Pasquale Diana (44-20) 7325 0745
pasquale.m.diana@jpmorgan.com

Gross domestic product

Source: Statistics Norway.

Description: Quarterly expenditure-based accounts are provided in nominal and in real terms. Total GDP and the main components are presented both for the entire economy and for the "mainland" economy alone. The latter excludes petroleum based activity, which accounts for about 23% of the overall economy.

Timing: Published quarterly, eleven weeks after the relevant quarter.

Seasonal/focus: All data are provided in seasonally adjusted form as well as unadjusted.

Revisions: Revisions can be major and may occur years later.

Comments: The market's focus is on total and mainland GDP growth on a year ago. However, *GDW* focuses more on the dynamics in the mainland economy, particularly the quarter-on-quarter growth rates. The reason is that the oil-sector component is volatile and often does not reflect economic fundamentals. Economic policymakers also tend to look at the momentum in the mainland economy (since the oil-sector output is largely policy determined).

Industrial production

Source: Statistics Norway

Description: A monthly report that covers oil extraction and mining, manufacturing and energy supply. Indices (1995=100) are provided for the total and for manufacturing alone.

Timing: Reported five or six weeks after the reference period.

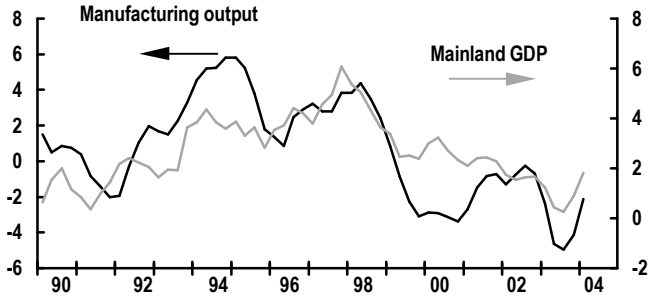
Seasonal/focus: Seasonally adjusted. The manufacturing sector index is considered be more relevant.

Revisions: Frequent revisions. The manufacturing index (32% of the total, with the rest being made up of energy output) is monitored more closely in the *Global Data Watch*, since it reflects more accurately the underlying trends in the mainland (non-oil) economy.

Comments: Manufacturing makes up only about 15% of Norwegian GDP, but it is a good indicator of the cyclical dynamics in the mainland economy and in employment (10% of total employment).

Manufacturing output and mainland GDP growth

%oya, both scales, 3qma



Business tendency survey

Source: Statistics Norway.

Description: A quarterly survey conducted by questionnaire. The survey includes several variables such as production volume, employment, new orders received, capacity use, bottlenecks in production, etc. In addition, businesses are asked to provide a general assessment of the outlook for the coming quarter.

Timing: Survey results are published in the fourth week of the quarter following that to which they refer.

Seasonal/focus: Indexes are seasonally adjusted.

Revisions: Minor.

Comments: Actual production, expected production and capacity utilization are a good gauge of business sentiment over time.

Labor report

Source: Labor Board (Aetat).

Description: This monthly report includes numbers of employed, unemployed, and numbers on government labor market schemes.

Timing: Published one week after the reference month.

Seasonal/focus: Data are available in seasonally adjusted form as well as unadjusted.

Revisions: Minor.

Comments: This is the most timely job market release in Norway. There is another release, from Statistics Norway, which comes eight weeks after the end of the reference period, and reports the unemployment rate as a three-month centered moving average. The difference between the two releases is

JPMorgan Chase Bank, London
Pasquale Diana (44-20) 7325 0745
pasquale.m.diana@jpmorgan.com

that Aetat only measure the registered unemployed, whilst Stats Norway numbers are survey-based. Because not all unemployed register at the job centres, Stats Norway figures are usually somewhat higher.

Retail sales

Source: Statistics Norway.

Description: Monthly sales by retailers; collected by survey. Breakdown available into types of goods. The series is available in value and volume terms (the latter deflated by retail prices).

Timing: Published nine weeks after the reference period.

Seasonal/focus: Data are available in seasonally adjusted form as well as unadjusted. Retail sales volumes are the main focus.

Revisions: Minor revisions.

Comments: Retail sales are a timely and fairly reliable indicator of quarterly private consumption.

Merchandise trade

Source: Statistics Norway.

Description: This monthly release covers merchandise exports, imports, and the trade balance in local currency terms. It provides a breakdown of exports into crude oil, natural gas, and "traditional" exports.

Timing: Published roughly two weeks after the end of the reference period.

Seasonal/focus: Data are available in seasonally adjusted form as well as unadjusted. For *GDW* total exports are adjusted for oil and natural gas to provide a better picture of trends in the mainland economy (and to exclude the large effects from swings in the oil price).

Revisions: Some.

Comments: With exports and imports adding up to about 70% of GDP, developments in the external sector are monitored closely. The mainland economy tends to run a merchandise trade deficit, while oil and gas exports push the balance into surplus.

Consumer prices

Source: Statistics Norway.

Description: A monthly weighted average of retail prices of selected goods and services.

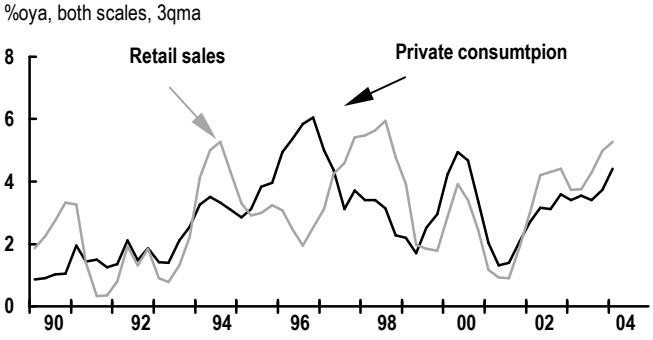
Timing: Published in the second week following the reporting period.

Seasonal/focus: Not seasonally adjusted. Focus is mainly on year-on-year growth rate.

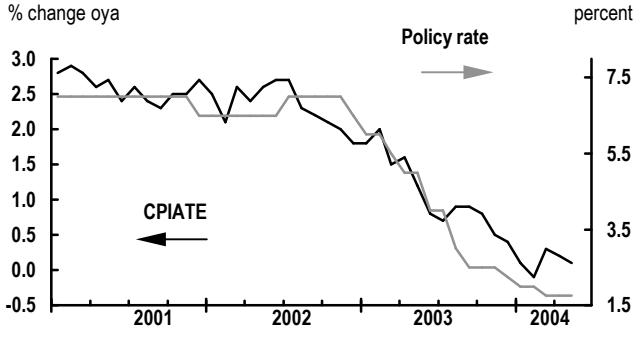
Revisions: None.

Comments: Economic policy tends to put greater focus on the "core" measures of inflation, CPI-ATE, which excludes energy and is adjusted for tax changes. Since March 2001, Norges Bank has switched to an explicit inflation target of 2.5%. A producer price report is published at the same time as the CPI.

Retail sales and private consumption in the GDP accounts



Norway: interest rates and underlying inflation



JPMorgan Chase Bank, London
Pasquale Diana (44-20) 7325 0745
pasquale.m.diana@jpmorgan.com

Sweden

The monthly data cycle

Same month	Following month	Second following month
Final third	**Around the 1st**	
Consumer confidence	PMI manufacturing	
Business confidence		
	Around the 11th	**Around the 11th**
	Consumer prices	Industrial production
	New orders	
	Activity index	
	Second third	
	Unemployment	
	Final third	
	Retail trade	Trade balance

The quarterly data cycle

Final month of quarter	Following month	Third following month
Inflation report	Business confidence	GDP Capacity utilization

JPMorgan Chase Bank, London
Pasquale Diana (44-20) 7325 0745
pasquale.m.diana@jpmorgan.com

Gross domestic product

Source: Statistics Sweden (SCB).

Description: Quarterly expenditure-based accounts are provided in nominal and in real terms (currently based on 1995 prices), along with the deflators. Also, production-side GDP statistics are available on a quarterly basis.

Timing: First estimates are published around twelve weeks after the quarter covered.

Seasonal/focus: The main national accounts data are provided in seasonally adjusted form as well as unadjusted.

Revisions: Revisions are often major.

Comments: Markets tend to focus on changes in GDP, more especially the year-on-year growth rates. The high volatility of the GDP series, coupled with the tendency for substantial revisions to be made to the initial estimates, means that individual quarterly readings should be treated with caution. Inventory estimates are especially volatile. Hence, domestic final sales are probably a better gauge of underlying trends in activity.

Industrial production

Source: Statistics Sweden (SCB).

Description: A monthly report that covers both manufacturing and mining. Detailed breakdowns available by industry. Also published by broad end-use classification (intermediate goods, durable and nondurable consumer goods, capital goods, etc.)

Timing: Preliminary report appears about eight weeks after the month in questions.

Seasonal/focus: All data are available seasonally adjusted. Occasionally there have been problems with adjusting for severe fluctuations in operating rates during the summer months.

Revisions: Revisions are quite common.

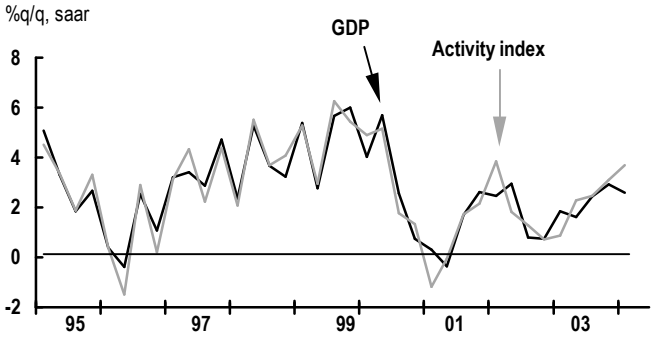
Comments: Taken together with retail sales and exports data, industrial production estimates are useful in gauging quarterly GDP.

New orders

Source: Statistics Sweden (SCB).

Description: A monthly report of the volume of orders placed with firms in the mining and manufacturing sectors, categorized by source (foreign versus domestic, and by industry). In addition to the volume of new orders, estimates of the volume of deliveries are available (and with similar breakdowns).

Sweden: GDP and activity index



Timing: Released with IP.

Seasonal/focus: Seasonally adjusted, but nevertheless extremely volatile. Not much attention is given to these data by the markets.

Revisions: Often significant.

Comments: Can be used as a leading indicator of industrial production, although the data are extremely noisy and need to be smoothed using a 3m/3m or a 6m/6m moving average. The report also provides a check on how well exporters are doing.

Activity index

Source: Statistics Sweden (SCB).

Description: This monthly index is put together by Stats Sweden and is essentially an aggregate of five economic variables: IP, number of hours worked for employees in the public sector, retail sales, imports, and exports. The index is calibrated to GDP so that there is no bias for any quarter for ex-post data. The index is used as a monthly gauge of GDP developments.

Timing: Released with IP and orders.

Seasonal/focus: Available in both seasonally adjusted and unadjusted format. The report is not given much importance by the market.

JPMorgan Chase Bank, London
Pasquale Diana (44-20) 7325 0745
pasquale.m.diana@jpmorgan.com

Revisions: The index gets revised to the same extent that past GDP data get revised.

Comments: Given the delay with which official GDP data are released, the Activity Index is useful to analysts for fine-tuning a GDP forecast.

Capacity utilization

Source: Statistics Sweden (SCB).

Description: A quarterly measure that attempts to gauge actual output against what could be produced with the current stock of capital. Covers only manufacturing and mining.

Timing: Around three months after the quarter covered.

Seasonal/focus: Available in seasonally adjusted form.

Revisions: Often revised, though usually only slightly, to take into account new information on actual output.

Comments: Often referred to by the Riksbank as well as independent analysts as a useful measure of potential inflationary pressures. Rarely given much weight by the markets, perhaps because industrial production gives a more timely signal of latent price pressures. Worth noting that there are two more measures of capacity use, one published by Eurostat and another published by the KI institute. Divergences between these series can be rather large.

Business tendency survey

Source: NIER/KI.

Description: The index is complied in accordance to EU standards. The questions asked cover both outcomes for recent months and expectations and plans for the coming three months.

Timing: Survey results are published in the last week of the reference month.

Seasonal/focus: Indices are seasonally adjusted.

Revisions: Minor.

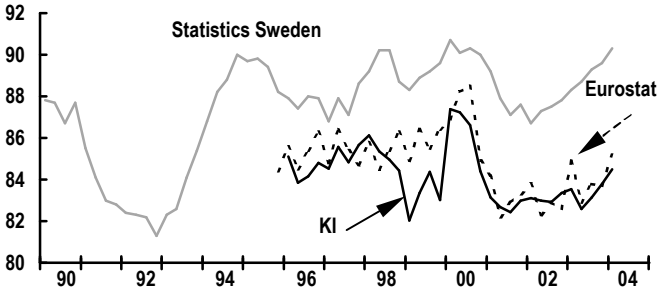
Comments: Useful gauge of industrial activity (usually comes out ahead of the PMI for the same month). There is also a quarterly business survey, which includes a significantly larger amount of detail than the monthly survey.

Labor force survey

Source: Statistics Sweden (SCB).

Capacity use in industry

percent



Description: A monthly report of both employment and unemployment. Labor Force Surveys (LFS) of about 21,000 people are used as the basis for the employment and unemployment estimates. The headline unemployment total excludes those on government schemes.

Timing: Around three weeks after the month covered.

Seasonal/focus: Seasonally adjusted figures are available from SCB

Revisions: Slight revisions to the number of people on schemes.

Comments: Provides a quick reading on activity, although fluctuations in participation rates and the small size of the surveys used limit the usefulness of the data. The Swedish Labor Market Board publishes weekly (unadjusted) unemployment numbers, which can be used as a good tracker for developments in the month.

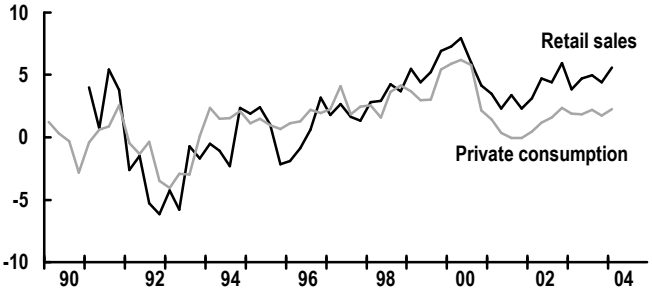
Retail sales

Source: Statistics Sweden (SCB).

Description: A monthly report of the volume of retail trade at motor vehicle, beverage, pharmacy, and liquor stores, and

Sweden: retail sales and private consumption in the GDP accounts

%change oya



JPMorgan Chase Bank, London
Pasquale Diana (44-20) 7325 0745
pasquale.m.diana@jpmorgan.com

at repair shops for personal and household goods. A breakdown of durable versus nondurable goods is useful for assessing the effect of interest rate moves on consumer durables spending.

Timing: Appears around eight weeks after the month covered.

Seasonal/focus: Seasonally adjusted volume data are of most interest in gauging trends in spending. Given the volatility of the series, focus on a 3m/3m moving average.

Revisions: Often substantial.

Comments: The retail sales data are volatile, and hence should be viewed with caution. However, they are by far the best available indicator of household spending.

Consumer sentiment survey

Source: NIER/KI

Description: A monthly survey of around 1,500 individuals, conducted by telephone. The overall index is an average of responses to questions on overall economic conditions, individual households' conditions, prices, employment, and plans to buy durable goods. (The surveys have been altered so that they are now on the same basis as those used elsewhere in the European Union).

Timing: Surveys used to be conducted quarterly. Since the beginning of 1993, however, they have been conducted monthly. Survey results are published in the third week of the month following that to which they refer.

Seasonal/focus: Indexes are not seasonally adjusted, but seasonality is not strong, according to SCB.

Revisions: Minor.

Comments: Often volatile, but provides a good gauge of household sentiment over time. Tends to pick up movements in equity markets as well as geopolitical tensions, thus not always a reliable indicator of actual spending patterns.

Merchandise trade

Source: Statistics Sweden (SCB).

Description: A monthly report of the value of exports, imports, and trade balance in local currency terms. Aggregate data only are provided in the first snapshot of trade flows. Commodity, end-use, and destination/origin breakdowns of trade are made available with a lag (usually two months).

Timing: Released in the fourth week of the following month.

Seasonal/focus: Seasonally adjusted figures are available from SCB

Revisions: Often significant and far-reaching.

Comments: Trade data are important in helping to build up a picture of overall growth prospects. Total exports (of both goods and services) comprised 49% of GDP in 2002, and imports 38%.

Consumer prices

Source: Statistics Sweden (SCB).

Description: Monthly price indices (1980=100) are provided for detailed categories of goods and services. In addition to the headline CPI, a "core" series is calculated (UND1X), which adjusts prices for the effects of changes in taxes and subsidies, and excludes mortgage interest costs. For the purposes of comparison with other European countries, it is useful to look at HICP (EU-harmonized) inflation.

Timing: Second week of the following month.

Seasonal/focus: Not seasonally adjusted. The main focus is on the inflation rates.

Revisions: Rare, of minor importance when they do occur.

Comments: The annual headline inflation rate is of prime importance to policymakers and markets alike since, following the abolition of the fixed exchange rate link with the ECU in 1992, the Riksbank decided to set an inflation target. In order to keep inflation close to 2% in the medium term it set a "range of tolerance" of 1% to 3% for CPI inflation effective from 1995 onward. Once every three months the Riksbank publishes an *Inflation Report,* in which its economists present an analysis of past and future inflation trends. This report is a big market mover.

It is worth highlighting that the Riksbank can decide to focus on alternative measures of inflation if it deems necessary. For example, at the start of 2004, the bank announced it would look at UND1X ex-energy. This is because the energy components were fluctuating widely, owing to large base effects, hence providing a picture that was too influenced by one-off effects. UND1X ex-energy is measured by the Riksbank.

JPMorgan Chase Bank, Moscow
Julia Ovanessian (7-095) 937-7321
julia.e.ovanessian@jpmorgan.com

Russia

The monthly data cycle

Following month	Second following month	Third following month
First third	**First third**	**First third**
International reserves	Broad money	Arrears
Consumer price index	Monetary survey	Consolidated budget
IET business survey		
Middle third	**Middle third**	
Industry report	Merchandise trade	
	Federal budget	
Final third		
Producer price index		
Unemployment		
Average wages and incomes		
Wage arrears		
Fixed investment		
Output in five major sectors		
Construction output		
Agriculture output		
Transportation turnover		
Retail sales		

The quarterly data cycle

Following month	Second following month	Third following month
		National accounts/GDP
		Balance of payments

The weekly data cycle

Thursday	Friday
International reserves	Monetary base

JPMorgan Chase Bank, Moscow
Julia Ovanessian (7-095) 937-7321
julia.e.ovanessian@jpmorgan.com

Gross domestic product

Source: State statistics committee (Goskomstat).

Description: Quarterly output-based national accounts are published in both nominal and real terms (1995 prices for 1995-1999 and 2000 prices for 2000 and beyond). Goskomstat also releases GDP by demand (in both nominal and real terms) and income components (in nominal terms) (table). The data are available since 1996.

GDP composition in 2003

% of nominal total

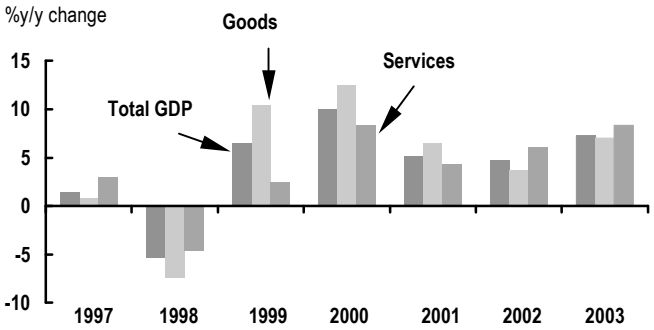
Total output	100
Production of goods	36
Industry	24
Agriculture	5
Construction	6
Production of services	53
Market services	44
Transport, communication	8
Trade	20
Non-market services	10
Net taxes on products	11
Total expenditure	100
Private consumption	67
Household	49
Government	17
Nonprofit institutions	1
Investment	21
Fixed investment	18
Change in inventories	2
Net exports	11
Exports	35
Imports	23
Total income	100
Employee compensation	46
Net taxes on pdts and impts	14
Gross mixed income	40

Data compilation is based on the UN's *System of National Accounts of 1993*. Data sources are regular quarterly reports of enterprises, government records, and primary data from the agriculture sector. Reports are collected from all large and medium-sized enterprises in Russia; data for small enterprises are estimated from quarterly sample surveys covering 20% of such enterprises.

Timing: Headline quarterly GDP report (by production components) appears within three months following the reported period, typically during the second or third month.

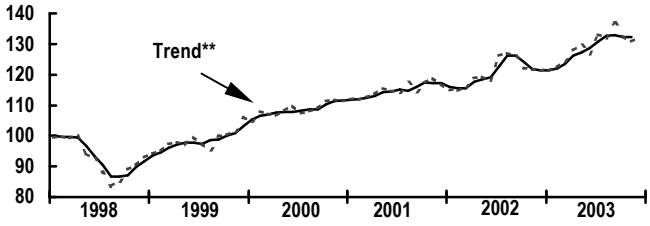
Seasonal/focus: No official seasonal or working-day adjustment is available. Focus is on the growth rate of real GDP over a year earlier.

Real GDP growth: total and by components



Output in five major sectors of the economy

index, seasonally adjusted by JPMorgan



* Industry, construction, agriculture, transport and retail sales
** 4-month moving median measured in third month

Revisions: The data are subject to frequent revisions. Quarterly data are officially revised seven months following the reported quarter, and finally in March of the second year following the reported quarter. Annual data are revised in November of the year following the reported and the final revision is in November of the second following year.

Comments: The Russian GDP report includes estimates for the shadow economy.

Output in the five major sectors

Source: State statistics committee (Goskomstat).

Description: This indicator is the closest monthly approximation for gross domestic product. It combines official monthly releases of output volume in five key sectors: industry, agriculture, construction, retail sales, and transportation. The data are published as monthly and annual percentage changes of the volume index. The exact weighting system for the index is not officially available. Historical data are available since January 1997.

Timing: The data are released in the third or fourth week of the month following the reported period.

Seasonal/focus: No official seasonal or working-day adjustment is available. Focus is on real annual growth rates.

Revisions: Infrequent, but can be substantial, especially for the full year.

Comments: Monitoring of this indicator is becoming more important as a way of gauging broad developments in the real economy, although the monthly industrial production report traditionally has been more closely watched. Separate reports on output in agriculture and construction, as well as transportation turnover are available around the same time each month.

JPMorgan Chase Bank, Moscow
Julia Ovanessian (7-095) 937-7321
julia.e.ovanessian@jpmorgan.com

Industrial production

Source: State statistics committee (Goskomstat).

Description: Monthly industrial production is reported as month-on-month and over year ago changes in Laspeyres volume indices (1995=100). No levels are published. Volumes are measured in physical units with no allowance for quality improvement and drawing upon output indicators for representative product groups from 120 subbranches of industry.

Composition of IP in 2003

% of total

All industry	100.0
Electric power	12.0
Fuel production	18.5
Ferrous metallurgy	9.8
Nonferrous metallurgy	7.4
Chemicals	5.5
Machinery	19.9
Wood and paper products	4.2
Construction materials	3.1
Food and beverages	14.1
Light industry	1.4
Other industries	4.1

Each subbranch is gauged on a fixed basket of representative products. The weight of each subbranch in the aggregate indices is in proportion to its value added in the base year. The decision to change the base year, currently 1995, is taken depending on intensity of structural changes in industry. The indices are calculated and published for total industry, 16 main branches, the 120 subbranches, and the specific products.

Timing: The initial report with headline data typically are published in the second or third week of the month following the reference month. The full detailed data appear in the statistical bulletins later.

Seasonal/focus: An official working-day adjusted series is available and published in a separate column for each indicator for total industry and subbranches (back to year 1999). There is no official seasonal adjustment. Focus is on headline annual growth of total industrial output volume.

Revisions: Revisions of the monthly indices of industrial production take place at year end, as well as when substantial adjustments of methodology are implemented.

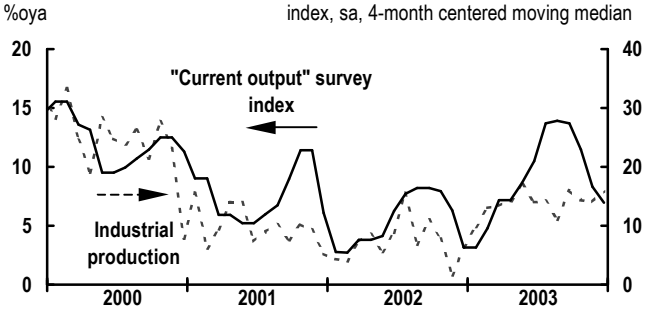
Comments: The official production series, based purely on physical units without allowing for quality changes, likely understates actual output growth in Russia.

Industrial business survey

Source: Institute for the Economy in Transition (IET).

Description: The survey produces so-called "balances of responses"; i.e., differences between the percentage of positive and negative answers to survey questions. It is released prior to the industry report for the reference month. The survey is conducted based on the European Harmonized

IET industrial business survey versus industrial production



Questionnaire with methodological support from the European Commission, Eurostat, and the OECD. It includes questions on the recent and expected trend in output, prices, order books (cash and barter), inventory assessment, and other items. The questions refer to the last three months' developments and expectations for the upcoming three months. The headline series is available back to March 1992, but several subindicators have a shorter history.

Timing: The survey results are available as early as the last week of the reference month.

Seasonal/focus: The Institute does not publish seasonally adjusted data, even though seasonal patterns are obvious. Focus is on the indicator of the "recent trend in output."

Revisions: Past data are revised sporadically

Comments: In general, the data exhibit large fluctuations from month to month and are better analyzed on a quarterly basis. However, the "recent trend in output" series correlates well with over-year-ago growth in industrial production and serves as a useful leading indicator.

Unemployment

Source: State statistics committee (Goskomstat).

Description: A monthly report of the number of officially registered unemployed, the total estimated number of unemployed, and the unemployment rate (as a percentage of the work force). The number of unemployed is published both in millions and as a percentage change compared to the same period of the previous year. The estimated total number of unemployed is calculated in accordance with ILO methodology; i.e., it includes people of working age who are looking for a job and ready to start on a full-time basis.

Timing: The data are published in the third or fourth week of the month following the reference month.

JPMorgan Chase Bank, Moscow
Julia Ovanessian (7-095) 937-7321
julia.e.ovanessian@jpmorgan.com

Seasonal/focus: No official seasonal adjustment is available. The headline data are the estimate of total unemployed and the unemployment rate.

Revisions: The monthly data are preliminary and subject to frequent revisions. Indeed, because they are revised after each new labor force survey, the initially published data are not very reliable.

Comments: The final monthly data are published 16 weeks after the reported period.

Retail sales

Source: State statistics committee (Goskomstat).

Description: A monthly report of sales of goods, at current prices in billions of roubles and in the form of annual and monthly real growth rates. Covers the value of consumer goods sold to the population for household use. The series is also broken down into food and nonfood products.

Timing: Released at the end of the month following the reported month.

Seasonal/focus: No official seasonal or working-day adjustments are available. Focus on "real" annual growth rates.

Revisions: Subject to large short-term fluctuations and substantial revisions.

Comments: Retail sales are an important and timely indicator of private consumer spending. A complementary series for paid services is published as well, but is less publicized than retail sales.

Fixed capital investment

Source: State statistics committee (Goskomstat).

Description: The monthly series on fixed capital investment covers all expenditures on creation and reproduction of capital assets (new construction, enlargement and restoration, acquisition of buildings, and purchase of equipment and machinery) by enterprises and organizations of all types of ownership. The data are presented at current prices and as monthly and annual percentage changes at constant 1996 prices.

Timing: The data are released in the third or fourth week of the month following the reported month.

Seasonal/focus: No official seasonal or working-day adjustment is available. Focus is on real annual growth rates.

Revisions: Infrequent, but can be substantial, especially for the full year.

Comments: Excludes VAT starting 2001; past data were adjusted to be comparable to the new treatment.

Merchandise trade balance

Source: Central Bank of Russia (CBR)

Description: Monthly foreign trade data are based on State Customs Committee declarations, Goskomstat's survey data on exports and imports unrecorded in customs statistics (not crossing the border), and recalculations of the CBR in accordance with balance of payment methodology (in order to estimate official unregistered trade). The report includes US dollar value data on total exports, imports, and the trade balance, and breakdowns by CIS and nonCIS country trade partners. Both exports and imports are recorded on a f.o.b. basis. No volume data or price indicators are available.

Timing: The data are published in the second or third week of the second month following the reported period. Focus on overall exports, imports, and the balance.

Seasonal/focus: No official seasonal or working-day adjustment is available.

Revisions: The data are subject to frequent revisions.

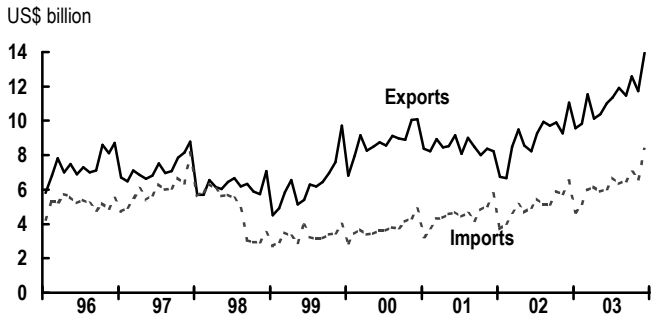
Comments: A separate, more comprehensive report on trade, published quarterly by Customs Committee, contains volume and price data for some export and import categories.

Balance of payments

Source: Central Bank of Russia (CBR)

Description: Balance of payment data are compiled on quarterly basis by the Central Bank of Russia. The IMF's fifth

Merchandise exports and imports



JPMorgan Chase Bank, Moscow
Julia Ovanessian (7-095) 937-7321
julia.e.ovanessian@jpmorgan.com

edition of the Balance of Payment Manual provides the methodological basis. The data are published in both analytical and "neutral" presentations. The neutral presentation is prescribed by international standards and published in an abridged version a day earlier than the analytical presentation (also abridged). The full neutral presentation (published with a delay) contains all standard details and is broken down by CIS and NonCIS countries.

Balance of payments in 2003

net balances, "neutral" presentation, US$ billion

Current account	**35.9**
Merchandise trade	60.5
Services	-11.1
Income	-13.1
Transfers	-0.4
Capital/financial	**-2.3**
Capital transfers	-1.0
Direct investment	-3.0
Portfolio investment	-4.2
Other investment	5.9
Net intl reserves flow	**-26.4**
Errors and omissions	**-7.2**

Timing: The headline abridged neutral presentation appears on the last day of the third month following the reference quarter. The detailed data appear a month or two later together with basic analysis performed by the CBR. The data series are available on a quarterly basis since the beginning of 1994.

Seasonal/focus: No official seasonal or working-day adjustment is available.

Revisions: The balance of payments data for previous years are subject to frequent revisions. Revisions are also made to incorporate new information sources and improvements in the methodologies for calculating individual indicators.

Comments: The capital account includes some categories that are supposed to capture capital flight, such as "nonrepatriated export revenues." Also, the balancing item "net errors and omissions" is considered largely to reflect capital flight.

International reserves

Source: Central Bank of Russia (CBR).

Description: Gross international reserves of the central bank and Ministry of Finance are published weekly and monthly, based on standard IMF definitions, in millions of US dollars. Foreign exchange assets are revalued each week using market exchange rates; monetary gold is valued at a fixed price of $300 per ounce.

Timing: The data for each Friday appear on Thursday of the week following. Month-end data are published in the first week after the end of the reference month.

Seasonal/focus: No official seasonal adjustment is available. The headline number is the gross international reserves figure (including gold).

Composition of reserves

US$ billion at end Dec 2003

Total foreign reserves	100.0
Foreign exchange	73.2
Foreign currency assets	73.2
SDRs	0.0
Reserve position in IMF	0.0
Monetary gold	3.8

Revisions: From September 1, 1999 international reserves exclude foreign currency balances in the correspondent accounts of resident banks at the Bank of Russia, except for funds allocated by CBR to the Vneshekonombank for servicing the government foreign debt.

Comments: Currently, less than 75% of foreign reserve holdings are in US$, while the share of Euro and other currencies assets is above 25%.

Consumer price index

Source: State statistics committee (Goskomstat).

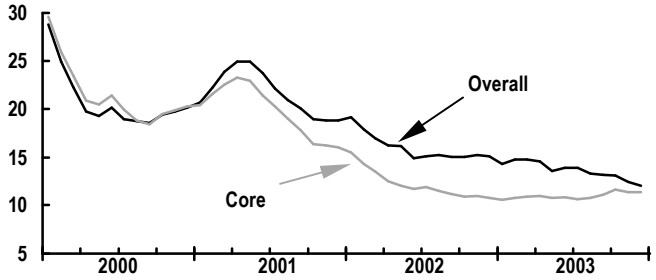
Description: The monthly consumer price index (CPI) is calculated on the base of a representative household spending basket and uses a modified Laspeyres formula (the previous month is the base). Prices for around 412 goods and services in 196 cities are included in the basket. The CPI includes all major groups of goods and services. Overall, it covers 400,000 prices and tariffs and 30,000 retail outlets.

The index weights for the current year derive from the structure of household expenditures in the previous year, as gauged by the annual household budget survey. The CPI is calculated and published as a whole and by three components: food goods, nonfood goods, and services. Indices for several groups of goods and services and some separate goods are published as well.

Timing: Released at the end of the first or the beginning of the second week following the reported month.

Overall and core consumer inflation

% oya, core inflation is JPMorgan estimate



JPMorgan Chase Bank, Moscow
Julia Ovanessian (7-095) 937-7321
julia.e.ovanessian@jpmorgan.com

Seasonal/focus: No official seasonal adjustment is available. Focus is on the headline figure—month-on-month percentage change in the overall index, as well as key components, and lately also on over-year-ago changes. Since 2003 Goskomstat has published a "core" inflation estimate (excluding fresh fruits and vegetables, fuels, passenger transport, communication services, almost all housing and communal services, and several legal and bank services). No historical data are available for "core" inflation, and for this reason JPMorgan has not begun to examine this series in any depth.

Revisions: The data may be revised for up to one year after the original release. Revised data are published in the next publication after the revision.

Comments: Goskomstat does not officially publish the weights of the components. Informal statements from the agency hint at weights of 55% for food goods, 30% for non-food goods, and 15% for services.

Industrial producer price index

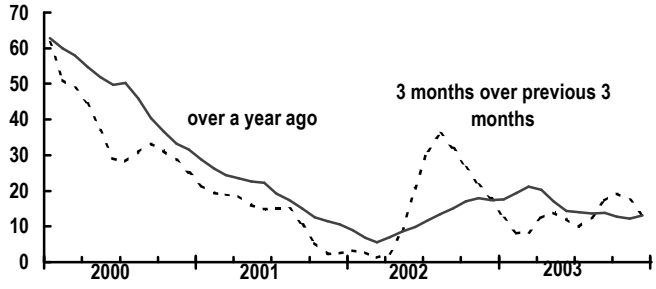
Source: State statistics committee (Goskomstat)

Description: The monthly industrial producer price index is the most important and widely used measure of inflation. It records actual prices for industrial goods produced by domestic enterprises and sold in the domestic market.

The indices are calculated on the basis of a monthly sample survey, covering more than 800 representative products, reported by more than 6,000 enterprises up to the 20th of the month. It covers about 50,000 prices on representative goods for all industries. The weights are calculated from the value of production in current prices (excluding VAT and excise taxes) of the base year. The PPI is broken down into 11 main branches of industry.

Timing: The industrial PPI is usually published in the third or fourth week of the month following the reference period.

Industrial producer price index
% change, annualized



Seasonal/focus: No official seasonal adjustment is available. Focus is on the month-on-month change in the index.

Revisions: There can be revision going back one year.

Comments: Goskomstat also publishes PPIs for other sectors (construction, agriculture, transport and communication services). However, these are much less publicized.

Average monthly wages

Source: State statistics committee (Goskomstat).

Description: Average monthly nominal wages and salaries per employee are calculated and published in roubles for the economy as a whole, for individual main sectors, and for all branches of industry. The report refers to gross earnings including direct wages and salaries, overtime payments, bonuses, commissions, remuneration for time not worked (vacation, holidays, sick leaves), and allowances for special working conditions. The data do not include social benefits from public and nonpublic extra-budgetary funds. The data are obtained from monthly surveys of large and medium-sized institutions and a quarterly sample survey of small institutions.

Timing: The data are released in the third or fourth week of the month following the reference period, followed by details a week later in *Social-economic situation in Russia*.

Seasonal/focus: An official real wage index series is available that adjusts the average nominal wages index by monthly CPI changes. An official seasonally adjusted series is not available.

Revisions: The data for the latest published month are preliminary, with final data appearing in the same publication a month later.

Comments: The data actually refer to official gross earnings, which can at times substantially diverge from actual earnings, owing to payment arrears and the widespread practice of nonofficial wage payments.

Arrears

Source: State statistics committee (Goskomstat).

Description: A monthly report whose headline numbers are total overdue payables and total overdue receivables of enterprises as well as total wage arrears. Detailed data are in the bulletin *Social-economic situation in Russia*.

Arrears data are stocks at the end of the reference month, in billions of roubles. The main categories within overdue

JPMorgan Chase Bank, Moscow
Julia Ovanessian (7-095) 937-7321
julia.e.ovanessian@jpmorgan.com

payables are: payables to suppliers, to the budget, and to the extra-budgetary funds. A particular focus is the wage arrears of both the government and nongovernment sectors.

Timing: Wage arrears data appear in the second or third week of the following month. The data on enterprise arrears are published in *Social-economic situation in Russia* in the last week of the third following month or the first week of the fourth following month.

Seasonal/focus: No official seasonal adjustment is available.

Revisions: Sporadic revisions are made.

Comments: Owing to Russia's notorious nonpayment problems in the 1990s, arrears are a much more important indicator than in most other parts of Emerging Europe. Goskomstat regularly publishes complementary surveys on barter trade, offsets, and nonmonetary payments.

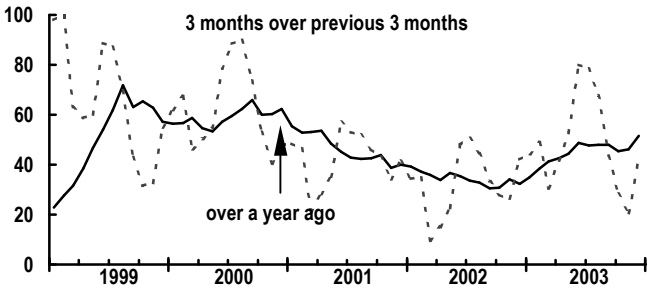
Monetary aggregates

Source: Central Bank of Russia (CBR)

Description: The key monetary aggregates are monthly broad money (M2) and the weekly monetary base. Month-end stock data on total M2 and its main components are published in cumulative year-to-date form in billions of roubles. M2 consists of two components: cash in circulation (in Russia, M0) and bank sight deposits in roubles of nonfinancial enterprises, organizations, self-employed individuals, and households, as well as term deposits in roubles at Russian credit institutions. In December 2003, the shares of cash and deposits in M2 were 36% and 64%, respectively.

The monetary base is a separately calculated and published indicator that comprises cash in circulation and commercial banks' obligatory rouble deposits at the Central Bank of Russia (minimum reserves). The monetary base stock in billions of roubles is published weekly, but starting with

Broad money (M2) growth
% change annualized



Aggregate balance sheet of the banking sector
roubles billion, end-December 2003

Assets		Liabilities	
Net foreign assets	2096	Broad money	3962
Domestic credit	3663	Money	2182
of which, to:		Quasi-money	1780
General government (net)	689	Restricted deposits	30
Nonfinancial public enterprises	143	Money market instruments	545
Private sector	2775	Capital accounts	1276
Other financial institutions	56	Other items (net)	-55

2002, CBR also publishes the broad monetary base in billion of roubles eop on a month-end basis, that includes balances of the corresponded bank accounts with the CBR, and stocks of CBR's bonds and reverse REPO obligations.

Timing: M2 is usually published in the last week of the first month following the reference period. The weekly monetary base is published in four working days after the end of the reported week, usually on Friday every week for the seven-day period ended on Monday that week.

Seasonal/focus: No official seasonal adjustment is available. The headline number for broad money is the total stock in billions of roubles.

Revisions: Usually no backward revisions.

Comments: The broad money indicator does not include foreign currency deposits, in contrast to the money and quasi-money aggregates calculated according to the monetary survey methodology (see below).

Monetary survey

Source: Central bank of Russia (CBR)

Description: Russia publishes a monthly monetary survey following IMF methodology in the form of consolidated analytical accounts for the monetary authorities and credit institutions. Stock data are reported for the last day of the month, derived from the monthly balance sheets of the CBR, all credit institutions, the government agent Vneshekonombank (based on commercial operations), and the Ministry of Finance. This survey is used also as a broad money survey, but the broad money aggregates calculated from this survey differ from the standard M2 calculation.

More detailed information is published separately in the form of analytical accounts for the monetary authorities and credit institutions.

JPMorgan Chase Bank, Moscow
Julia Ovanessian (7-095) 937-7321
julia.e.ovanessian@jpmorgan.com

Timing: The data for the month are usually published in the first week of the second month following the reported on the website.

Seasonal/focus: No official adjustments are available.

Revisions: One month following the release. Usually there are no further revisions.

Comments: The broad money survey indicator includes foreign currency deposits, in contrast to the broad money measure on the national definition, but does not incorporate restricted deposits, which are shown in the monetary survey as an independent line.

Federal budget performance (IMF definition)

Source: Economic Expert Group (EEG) Web address: www.eeg.ru. Official source for computation of these data is the Federal Treasury of the Ministry of Finance of the Russian Federation. However, it is not officially published by the Ministry of Finance.

Description: The monthly federal budget performance report details federal revenues, expenditures, and deficit financing on a cash basis according to IMF definitions (details in table). The financing side is broken down into net foreign and domestic financing, with each further split into main categories. Revenues from privatization are reported below the line as financing. An estimate of monthly nominal GDP is provided along with the report.

Federal budget report, January-December 2003
cash flows, % of GDP, including social tax

Revenues	19.4	**Expenditure**	17.7
Tax revenues	15.2	Debt service	1.6
VAT	6.6	Domestic debt	0.3
Profit tax	1.3	Foreign debt	1.3
Excise taxes	1.9	Non-interest expenditure	13.3
Customs duties	3.4	of which:	
Other tax revenues	2.0	Defence	2.7
Social tax revenues	2.7	Social sphere	2.3
Non-tax revenues	1.4	Financial aid to the regions	6.0
Budgetary funds revenues	0.1	Transfers to Pension fund	2.8
Overall balance			1.7
Deficit financing			-1.7
Net foreign financing			-2.0
Net domestic financing			0.3
Primary balance			3.4

Timing: The monthly data are updated on the website in the second or third week of the second month following the reference period. The major series of the report have a history back to 1999.

Seasonal/focus: No official adjustment of the data is available. News agencies do not typically pick up the data. Rather, agencies focus on first preliminary budget reports of the Ministry of Finance on an accruals basis (first week of the month following the reported).

Revisions: There can be significant revisions to the budget performance data.

Comments: The Ministry of Finance publishes the data on central government operations on a monthly cash basis on its web site. The data are published on a cumulative basis since the beginning of the reported year in billions of roubles; thus no monthly history is available. The data are less detailed than the information published by the EEG and appear later.

Consolidated budget

Source: Ministry of Finance, published by State Statistics Committee (Goskomstat).

Description: A comprehensive monthly report on the consolidated budget (combining federal and regional budgets), published on an accruals basis. The data are split into revenues and expenditures and into federal and regional levels of government, as well as other details. Separately, some headline data are available on a cash basis both for the federal and the consolidated regional and local budgets. The details of the deficit financing of the consolidated budget are not reported.

Timing: The data in *Social-economic situation in Russia* are published in the last week of the second following month or the first week of the third following month after the reference period.

Seasonal/focus: No official seasonal or working-day adjustment is available.

Revisions: Frequent revisions.

Comments: The data on an accruals basis will become increasingly important as Russia's arrears problem eases.

JPMorgan Chase Bank, Istanbul
Yarkin Cebeci (90-212) 326-8590
Yarkin.cebeci@jpmorgan.com

Turkey

The monthly data cycle

Following month	Second following month	Third following month
First third	**First third**	**First third**
Consumer prices Wholesale prices Business sentiment	Industrial production	Foreign trade indices
Middle third	**Middle third**	
Capacity utilization	Merchandise trade	
Final third	**Final third**	
Central budget	Balance of payments Domestic debt stock	

The quarterly data cycle

	Second following month	Third following month
	National accounts Q2/Q3	National accounts Q1/Q4 Wage survey Unemployment data External debt stock

Sources of economic data releases

State Institute of Statistics (SIS): Publishes statistics on Turkish inflation, industrial production, employment, foreign trade, and wages. Provides information on methodology. Also provides the release calendar. http://www.die.gov.tr

Central Bank of Turkey (CBOT): Publishes statistics on monetary aggregates, balance of payments, as well as its daily balance sheet with a two-day lag. The bank also produces weekly statistical press bulletins, monthly and quarterly reports. The bank recently started producing monthly inflation and monetary policy reports. http://www.tcmb.gov.tr

Undersecretariat of Treasury (UT): Publishes budget financing, domestic and external debt data. http://www.treasury.gov.tr

Ministry of Finance (MoF): Publishes statistics on central government budget. http://www.maliye.gov.tr

JPMorgan Chase Bank, Istanbul
Yarkin Cebeci (90-212) 326-8590
Yarkin.cebeci@jpmorgan.com

Gross domestic product

Source: State Institute of Statistics (SIS).

Description: Quarterly expenditure-based national accounts are provided in both nominal and real (1987 prices) terms. Also included in the report are output-based accounts and deflators for both measures of GDP. SIS also publishes national income accounts (in current prices) with an additional three-month lag. All the data are compiled in accordance with the ESA 1993 methodology and all standard details are provided.

GDP by expenditure

% of total in 2002

Total GDP	100.0
Private consumption	63.2
Public consumption	8.4
Private investment	12.6
Public investment	6.5
Stockbuilding	5.1
Exports	39.4
Imports	34.9

Timing: Preliminary estimates released three months after the end of the reference quarter for the first and fourth quarters, and two months after the end of the reference quarter for the second and third quarters. Comparable history of the series goes back to 1987.

GDP by output

% of total in 2002

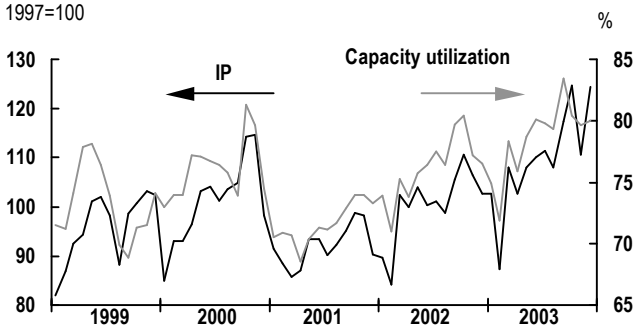
Total GDP	100.0
Agriculture	13.5
Industry	28.3
Construction	5.1
Trade	22.3
Transport , communication	13.1
Housing	4.8
Other	12.9

Seasonal/focus: Seasonally adjusted data are not available. Focus is mainly on unadjusted over-year-ago changes.

Revisions: Substantial revisions are quite rare.

Comments: Although the GDP figures are announced with some delay, they still provide useful insight on the level and composition of domestic demand since there is hardly any other set of comprehensive data. There is no estimate of activity in the unrecorded economy, which is estimated to be as large as 50-80% of the official economy. GDP data get high coverage in the local press and thus usually have some impact on domestic sentiment.

IP and capacity utilization



Industrial production

Source: State Institute of Statistics (SIS).

Description: A monthly index (1997=100) measuring the volume of output in manufacturing, mining, and utilities. Construction activity is also measured, in a separate index. Data are compiled from a survey of 918 large state-owned and private enterprises, which represent about 70% of the total value of industrial production.

Timing: Released on the eighth day of the second month following the reference month.

Seasonal/focus: The series is adjusted neither for seasonal fluctuations nor for the number of working days. Focus is mainly on over-year-ago change.

Revisions: Usually modest.

Comments: The index is viewed as presenting a reliable picture of the industrial sector and thus is closely monitored by the markets. The petroleum sector exhibits rather an erratic trend, so it may be better to construct an index excluding this sector.

Capacity utilization

Source: State Institute of Statistics (SIS).

Description: Monthly capacity utilization rates in manufacturing are obtained as part of the Monthly Manufacturing Industry Tendency survey which covers large manufacturing enterprises. In addition to capacity utilization rates, the survey provides information on production, sales, and prices. Survey respondents report the current situation concerning the level of capacity usage and a weighted average of these answers determines the headline capacity usage figure. Respondents also state their views on realized and expected production, sales and price levels. The results are broken down at the ISIC Rev.3 two-digit industry level.

Timing: Released in the third week of the month following the reference month.

Seasonal/focus: The series is adjusted neither for seasonal fluctuations nor for the number of working days.

Revisions: Usually modest.

Comments: The lack of an official seasonally adjusted series is a significant limitation for analysts. Although the index lacks reliability, it provides the first picture on the performance of the manufacturing sector. Also, the mean expecta-

JPMorgan Chase Bank, Istanbul
Yarkin Cebeci (90-212) 326-8590
Yarkin.cebeci@jpmorgan.com

tion for the private sector manufacturing prices is a key input for inflation forecasts.

Confidence indicators

Source: Central Bank of Turkey (CBOT).

Description: A monthly report of sentiment among businessmen collected through an Economic Tendency Survey by the central bank. Respondents are asked about the present level as well as expectations for overall domestic and external demand, investment, and prices.

Timing: Published in the second week of the month following the reference month.

Seasonal/focus: Not seasonally adjusted. Focus is mainly on confidence in industry and overall economic sentiment.

Revisions: Usually quite modest.

Comments: Despite being produced for a number of years, these confidence surveys still do not receive the market attention they probably deserve. The central bank recently started conducting an Expectations Survey twice a month. Because the respondents are from the banking sector, the results have an important influence on the policy decisions of the central bank.

Unemployment

Source: State Institute of Statistics (SIS).

Description: A quarterly report of the number of people registered at the labor offices as actively seeking work. The unemployment rate is the percentage of registered unemployed in the total labor force (measured by a quarterly survey) during the quarter. An underemployment rate is also reported, which includes people who want to change their present job because of insufficient salary or because they do not work in their occupation.

Timing: The release date is third month following the reference period.

Seasonal/focus: Official seasonally adjusted data are not available.

Revisions: Slight revisions.

Comments: Although market focus is on the headline unemployment figure, an important detail for social researchers and economists is the unemployment rate among educated youth in cities. Underemployment rates are also followed.

Merchandise trade (customs data)

Source: State Institute of Statistics (SIS).

Description: A monthly report of imports and exports (both reported f.o.b.) and the balance of merchandise trade. The data are reported in US dollar terms. Available are commodity breakdowns (by the UN-endorsed ISIC Rev 2 and 3, SITC, and BEC categories) and by partner country or region. The SIS also publishes price and volume indices one month after the trade data announcement.

Timing: Released in the second week of the second month following the reference period.

Seasonal/focus: No seasonal adjustment. Focus is mainly on over-year-ago changes in exports and imports, and the balance in USD terms.

Revisions: Every month, usually modest but recently several major revisions have occurred.

Comments: Trade data are not market drivers because the market already has insight about the figures before the announcement, owing to earlier announced data from the Turkish Exporters' Assembly (TIM). The latter provides very timely weekly export data at the end of the reference week. For imports, monthly import tax data offer a reliable first impression.

Balance of payments

Source: Central Bank of Turkey (CBOT).

Description: A monthly report with detailed breakdowns for both the current and the capital and financial accounts in US dollar terms, compiled in accordance with the IMF's latest Balance of Payments Manual.

Timing: Released in the final week of the second month following the reference period.

Seasonal/focus: The data are not seasonally adjusted. Focus is on the current account balance. Also important is the net errors and omissions item, which is used as a proxy for investor confidence. A positive figure indicates a shift from foreign exchange held under Turkish pillows by domestic residents, into the domestic banking system.

Revisions: Can be large depending on the final customs data on merchandise trade.

Comments: CBOT started producing an analytic presentation of the balance of payments in 2002, making it easier to see the details especially in the capital account.

JPMorgan Chase Bank, Istanbul
Yarkin Cebeci (90-212) 326-8590
Yarkin.cebeci@jpmorgan.com

Consumer price index

Source: State Institute of Statistics (SIS)

Description: A monthly index (1994=100) covering 410 selected goods and services. Prices are collected in 62 provinces and from 6390 outlets. It is a fixed-weight (Laspeyres) index with weights based on average household expenditures derived from 1994 family budget statistics. The prices include all relevant taxes.

Composition of the CPI

% weighting

Consumer prices	100.0
Food and beverages	31.2
Clothing	9.8
Housing	26.0
Housewares	8.1
Health	2.8
Transportation	9.8
Other	12.3

Timing: Prices are collected twice each month (four times for vegetables and fruits). Data are released on the third day following the reference month.

Seasonal/focus: Data are not seasonally adjusted. Focus is on the headline CPI month-on-month change.

Revisions: None.

Comments: In the current scheme of implicit inflation targeting, the central bank uses this index in conveying its primary inflation target to the market. The index is a reliable indicator of the general price level, but since the weight of food prices is quite high, the series is afflicted with high seasonality. There is no estimate of core consumer inflation. Any such index excluding food and energy prices would face a credibility problem since these are such a major component of family living costs.

Wholesale price index

Source: State Institute of Statistics (SIS)

Description: A monthly index (1994=100) covering output prices in both agriculture and industry. Data are obtained from a survey of approximately 1,300 firms and farms, representing 70% of total production. It is a Laspeyres index with weights based on the industry census from 1994. It covers 678 items. For each sector, there is a breakdown of the total into public and private sectors.

Composition of the WPI

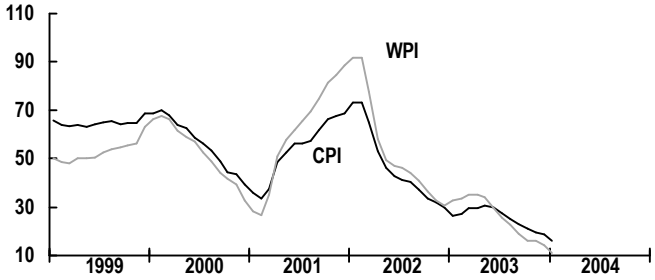
% weighting

Wholesale prices	100.0
Agriculture	22.2
Mining	2.5
Manufacturing	71.1
Utilities	4.2

Timing: Measured monthly, released on the third day following the reference month.

Consumer and wholesale prices

% change over a year ago



Seasonal/focus: Data are not seasonally adjusted. Focus is on the month-on-month change.

Revisions: There are no revisions.

Comments: Private sector manufacturing prices, which make up 54% of the index, are used as a proxy for core inflation. Although private manufacturing prices include food and energy prices, they have proved to be a good indicator of core inflation.

Employment costs and wages

Source: State Institute of Statistics (SIS)

Description: Quarterly reports of workers' earnings including wages, personal bonuses, and other salary or wage components. There are indices for both real and nominal wages, the former deflated using the wholesale price index. In each case, there is a breakdown of the total into private and public sector components.

Timing: Published in the third month following the reference period.

Seasonal/focus: Data are not seasonally adjusted. Focus is on the over-year-ago change in monthly wages in industry, both in nominal and real terms.

Revisions: Usually minor.

Comments: Although the data provide useful information for gauging the price competitiveness of the Turkish manufacturing industry, it does not receive much public attention mainly because the data come with such delay. The coverage is limited to the manufacturing sector, which is more unionized than other sectors, so it may be a misleading indicator of wage developments at a nationwide level.

JPMorgan Chase Bank, Istanbul
Yarkin Cebeci (90-212) 326-8590
Yarkin.cebeci@jpmorgan.com

Monetary survey

Source: Central Bank of Turkey (CBOT)

Description: A full range of weekly monetary aggregates are published in the central bank's Weekly Press Bulletin. Due to the high level of dollarization in the economy, M2Y (which is the sum of M2 and the dollar deposits in the banking sector) is most important. Domestic players also monitor M2YR, which includes the repo stock on top of M2Y. Also important are the separate developments in TL and FX deposits as they show the extent of currency substitution in the economy. The central bank also makes its balance sheet (including the monetary base, net domestic assets, and the bank's fx position) available on a daily basis with a one or two-day delay

Timing: The Weekly Press Bulletin of the central bank is published on the Thursday following the reference week (which runs from Monday to Friday).

Seasonal/focus: Data are not seasonally adjusted. Focus is on nominal over-year-ago growth of M2Y. Also closely watched is the trend of currency substitution.

Revisions: No revisions.

Comments: The daily announcement of the central bank balance sheet makes it quite easy to monitor the implementation of monetary policy. Also, since the balance sheet includes the deposits of the treasury at the central bank, market players can see how much reserve the treasury has before the T-bill auctions. Balance sheets of Turkish banks and in-depth analyses of the banking sector are available at the website of Banking Regulation and Supervision Agency (www.brsa.gov.tr)

State budget

Source: Ministry of Finance (MoF)

Description: Monthly budget data are published on a combination of cash accounting and accrual accounting bases. Interest payments are recorded on maturity. The Ministry of Finance data are very detailed, especially on revenues. Privatization revenues are included within the budget. The IMF definition of the budget, which categorizes privatization revenues as a below-the-line financing item, is published separately by the Undersecreteriat of Treasury.

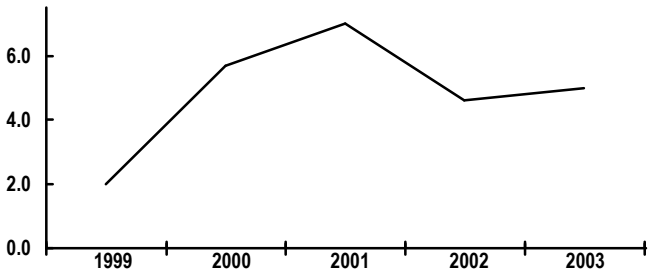
Timing: Released in the third week of the month following the reference month. The below-the-line details of the budget are published by the Treasury two weeks after the MoF announcement. The Treasury also provides cash-based budget results in the first days of the month following the reference period, but these are not detailed.

Seasonal/focus: Data are not seasonally adjusted. Focus is on the primary balance (before interest expenditures).

Revisions: No revisions.

Comments: Monitoring of the state budget still prevails in fiscal data watching, even though the fiscal performance criteria of the IMF standby program relate to the consolidated public sector balance which, in addition to the state budget, includes extra-budgetary funds, social security, and local government budgets. These comprehensive data are available only after IMF reviews. Still, they are important to watch for structural changes in the public finances.

Primary balance of the consolidated budget
% of GDP



JPMorgan Chase Bank, Istanbul
Yarkin Cebeci (90-212) 326-8590
Yarkin.cebeci@jpmorgan.com

Domestic debt stock

Source: Undersecreteriat of Treasury (UT)

Description: A monthly report of the stock of domestic debt outstanding, with a detailed breakdown of the central government debt stock according to maturity, lender, currency of issuance, and type (fixed or floating rate). The Treasury categorizes its debt as cash and noncash, with the noncash component including government paper that has been placed with public enterprises and state banks for their financing needs since the 2001 crisis. The redemption schedule for this noncash debt is also available on the Treasury's website. The Treasury recently started publishing its weighted average cost of funding on a monthly basis.

Timing: Released on the third week of the second month following the reference month.

Seasonal/focus: Data are not seasonally adjusted. Focus is on the headline stock in both Turkish lira and US dollars.

Revisions: There are no revisions.

Comments: The data provide a thorough presentation of the Treasury's liabilities. Any change in the composition of the liabilities can be observed immediately.

External debt stock

Source: Central Bank of Turkey (CBOT)

Description: Quarterly data on the external debt stock are published in US dollar terms. Debt data are categorized by borrower (the central government, the central bank, other public enterprises, banks, and the nonfinancial private sector), and by lender (banks, private lenders, official sources, bilateral sources, and bond issues). Both breakdowns are further categorized according to maturity (short-term versus medium- and long term).

Timing: Released in the third week of the third month following the reference month.

Seasonal/focus: Data are not seasonally adjusted. Focus is on the headline stock figure.

Revisions: Frequent.

Comments: The market focus is on the total public debt which is calculated by adding the domestic debt stock to the public sector external debt. In order to avoid double-counting, a portion of the IMF loans and the deposits of Turkish workers abroad held at the central bank (the so-called Dresdner account) should be subtracted.

JPMorgan Chase Bank, London
Radoslaw Bodys (44-20) 7777-0329
radoslaw.bodys@jpmorgan.com

Czech Republic

The monthly data cycle

Same month	Following month	Second following month
	First third	
	State budget	
	Consumer prices	
	Registered unemployment	
	Middle third	**Middle third**
	Producer prices	Industrial production
	Unit car sales	Monthly wages
		Retail sales
Final third	**Final third**	
Confidence indicators	Merchandise trade	
	Monetary survey	

The quarterly data cycle

	Second following month	Third following month
	Banking sector data	Balance of payments
	Employment/wage survey	Gross domestic product
		Spending on services

Sources of economic data releases

Czech Statistical Office (CSU): Publishes statistics on inflation, production, employment, foreign trade, and retail sales. Provides information on methodology. Also provides the release calendar. http://www.czso.cz

Czech National Bank (CNB): Publishes statistics on monetary aggregates, balance of payments, and its own monthly and annual reports. Also provides schedule for the meetings of the CNB Bank Board, monetary policy decisions, and minutes from the meetings. http://www.cnb.cz

Ministry of Finance (MFCR): Publishes statistics on central and general government budget and debt stock. http://www.mfcr.cz

Ministry of Labor and Social Affairs (MPSV): Publishes statistics on registered unemployment and job vacancies. http://www.mpsv.cz

JPMorgan Chase Bank, London
Radoslaw Bodys (44-20) 7777-0329
radoslaw.bodys@jpmorgan.com

Gross domestic product

Source: Czech Statistical Office (CSU).

Description: Quarterly expenditure-based national accounts are provided in both nominal and real (1995 prices) terms. Also included in the report are output-based accounts, and deflators for both measures of GDP. The data are compiled in accordance with the ESA 1995 methodology and provide all standard details.

Timing: Preliminary estimates released 11 weeks after the end of the reference quarter.

Seasonal/focus: Seasonally adjusted data are provided, but focus is mainly on unadjusted over-year-ago changes.

Revisions: Can be substantial.

Comments: Although it provides a rather delayed account of the state of the economy, markets watch this indicator for its comprehensiveness and importance in cross-checking the central bank's growth projections.

GDP composition in 2002
% of nominal total

Expenditure		Output	
Consumption	74	Agriculture	3
Private	52	Industry	30
Government	21	Construction	6
Nonprofit institutions	1	Services	54
Investment	28	Trade and repairs	16
Fixed investment	26	Transport/comunication	8
Change in inventories	2	Financial services	4
Exports	65	Business services	12
Goods	55	Other services	14
Services	10		
Imports	67		
Goods	58		
Services	9		

Industrial production

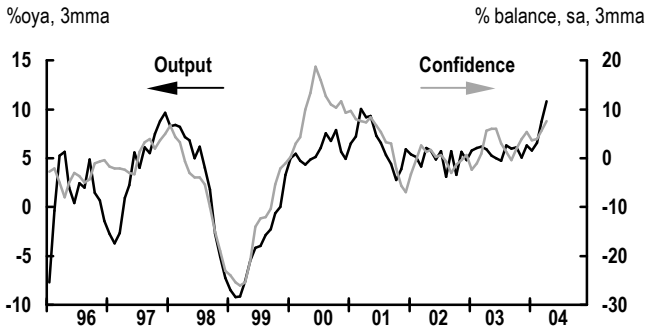
Source: Czech Statistical Office (CSU).

Description: A comprehensive monthly report on industry. Most closely watched is the production component, which measures the volume of output in manufacturing (87.8%), mining (3.3%), and utilities (8.9%). Construction activity is measured separately.

Timing: Released 40 days after the end of the reference month.

Seasonal/focus: Seasonally adjusted monthly changes are provided. Focus is mainly on over-year-ago change unadjusted for seasonality but adjusted for working days.

Confidence and output trends in Czech industry



Revisions: Usually modest, but a comprehensive annual revision can sometimes lead to more substantial changes.

Comments: Besides output, the report includes indices of industrial sales, employment, wages, and labor productivity. Labor productivity is calculated as the ratio of industrial sales (not output) to the average number of employees.

Confidence indicators

Source: Czech Statistical Office (CSU).

Description: These early monthly surveys measure overall economic sentiment and confidence in different business sectors as well as among consumers. Methodology largely conforms to that of the EU surveys of business and consumer confidence.

Timing: Published on the last week of the reference month.

Seasonal/focus: Seasonally adjusted. Focus is mainly on confidence in industry and overall economic sentiment.

Revisions: None.

Comments: Despite having been produced for a number of years, the confidence surveys still do not receive the market attention they probably deserve. The industrial confidence component has gained more weight recently as it is a measure of the industrial cycle—even if more contemporaneous than leading.

Registered unemployment

Source: Ministry of Labor and Social Affairs (MPSV).

Description: A monthly report of the number of people registered as actively seeking work through a labor office. Also reported is the unemployment rate: the percentage of registered unemployed in the total labor force as of the end of the month.

JPMorgan Chase Bank, London
Radoslaw Bodys (44-20) 7777-0329
radoslaw.bodys@jpmorgan.com

Timing: Released six working days after the end of the reference month, on the same day as the CPI.

Seasonal/focus: Official seasonal data are not available.

Revisions: There are no revisions.

Comments: Also available within the report is the number of job vacancies, which is a more forward-looking indicator of the economic cycle than unemployment.

Retail sales

Source: Czech Statistical Office (CSU)

Description: Monthly sales by retailers, broken down into autos, fuel, and nonauto goods. Reported in volume terms.

Timing: Released six weeks after the end of the reference month.

Seasonal/focus: Seasonally adjusted month-on-month and over-year-ago changes are available for the reference month. Focus, however, is on the unadjusted changes.

Revisions: Usually small. Final indices are published in May the following year.

Comments: In addition to retail sales, monthly data on spending on services are reported once per quarter. Note also that unit new car sales are available separately from industry sources. Although not well correlated with the automotive component of retail sales, the unit figures are published several weeks earlier (on www.autosap.cz) and can be useful on their own.

Merchandise trade (customs data)

Source: Czech Statistical Office (CSU)

Description: Monthly imports, exports, and balance of merchandise goods trade. The data are reported at f.o.b. values in CZK, USD, and EUR terms. Available are breakdowns into SITC categories and by partner country/region.

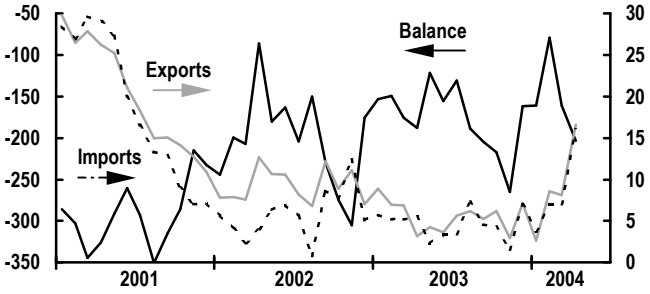
Timing: Measured monthly, released in the first decade of the second following month

Seasonal/focus: Seasonally adjusted month-on-month changes in exports and imports are available for the reference month. Focus is mainly on over-year-ago changes in exports and imports, and the balance.

Revisions: Starting in the second half 2003, the CSU has begun to make revisions only once per quarter. Previously, they occurred every month, usually in modest degree but several major revisions have occurred in recent years.

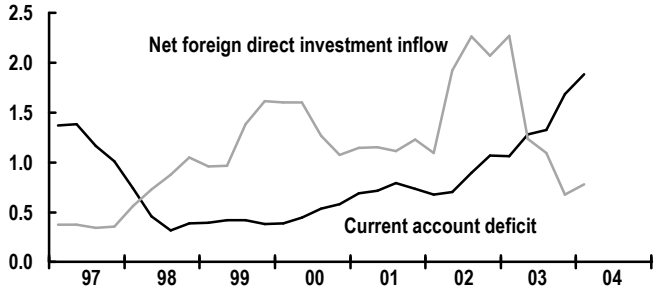
Merchandise trade (customs basis)

EUR million, 3mma, sa by JPMorgan %oya, 3mma



Current account deficit and net foreign direct investment inflow

EUR billion, 4qma, nsa



Balance of payments

Source: Czech National Bank (CNB)

Description: Detailed quarterly breakdowns of both the current and the capital and financial accounts, presented in CZK, USD, and EUR terms.

Timing: Released 65 days after the end of the quarter (85 days in the case of Q4 and annual data).

Seasonal/focus: Not seasonally adjusted. Focus is on the current account balance and foreign direct investment.

Revisions: Can be large depending on the final customs data on merchandise trade.

Comments: As of 2003, the CNB began to publish a preliminary balance of payments also on a monthly basis.

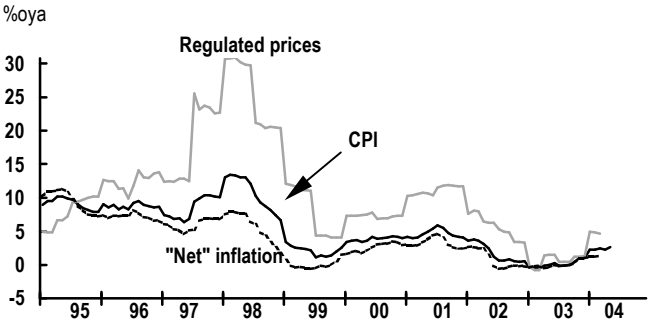
Consumer price index

Source: Czech Statistical Office (CSU)

Description: Monthly CPI computations are compatible with international standards and the COICOP methodology. The CPI is a fixed-weighted index calculated on a consumer basket that currently comprises some 790 selected goods and services. Prices include taxes. The weights of these

JPMorgan Chase Bank, London
Radoslaw Bodys (44-20) 7777-0329
radoslaw.bodys@jpmorgan.com

Czech CPI in perspective



items are based on average household expenditures derived from 1999 family budget data (table). The basket is reweighted every five years.

Timing: Prices are surveyed between the 1st and 20th calendar days of the month. Released on the sixth working day following the reference month.

Seasonal/focus: Not seasonally adjusted. Focus is on the headline CPI over-year-ago change.

Revisions: None.

CPI composition

% of total	
Total	100.0
Food, non-alcoholic beverages	19.8
Alcoholic beverages, tobacco	7.9
Clothing and footwear	5.7
Housing, water, energy, fuel	23.6
Furnishings, households	6.8
Health	1.4
Transport	10.1
Post and telecommunication	2.3
Recreation and culture	9.6
Education	0.5
Restaurants and hotels	7.4
Miscellaneous goods/services	5.0

Comments: Since January 1998, the CSU also has published so-called "net" and "core" inflation rates. The "net" inflation rate is headline CPI inflation excluding the impact of changes in regulated prices and indirect taxes. The "core" inflation rate is the contribution of "net" inflation in percentage points to overall CPI inflation. Market observers have paid attention to "net" inflation, especially when the CNB used it as the prime measure of inflation for its monetary policy strategy in 1998-2001 (in those years huge regulated price adjustments distorted the headline CPI, see chart). Presently, the CNB targets headline CPI inflation and the CSU no longer publishes "net" inflation on a monthly basis. Nonetheless, "net" inflation is still a useful indicator of underlying inflation pressure and the CNB publishes it in its quarterly *Inflation Reports*.

Producer price indices

Source: Czech Statistical Office (CSU)

Description: Four monthly producer price indices are published, of which the industrial producer price index is the most important. This is a fixed-weight index measuring domestic prices of the three main industrial activities: mining (3.5%), manufacturing (84.8%), and utilities (11.6%). The prices include neither indirect taxes nor transport and related costs.

Timing: Released on the ninth working day following the reference month.

Seasonal/focus: Not seasonally adjusted. Focus is on the over-year-ago change.

Revisions: There are no revisions.

Comments: The other, similarly constructed, producer price indices survey agricultural, construction, and market services prices.

Employment costs/wages

Source: Czech Statistical Office (CSU)

Description: Monthly labor earnings based on a survey of industrial and construction firms. Data include wages, personal bonuses, and other salary/wage components. Also included are values of in-kind benefits, such as use of motor vehicles for official and personal use. The data are measured gross.

Timing: The monthly earnings data are published for industry and construction only, as part of the respective industry reports, 40 days after the end of the reference month.

Seasonal/focus: Not seasonally adjusted. Focus is on the over-year-ago change in monthly wages in industry, both in nominal and real (CPI deflated) terms.

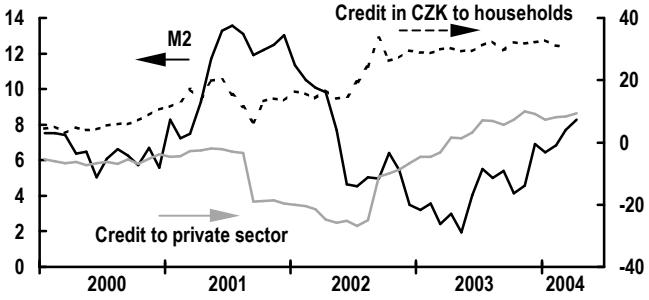
Revisions: Usually minor.

Comments: Also available are more comprehensive, quarterly wage data that cover business enterprises with 20 or more employees and all nonbusiness organizations.

JPMorgan Chase Bank, London
Radoslaw Bodys (44-20) 7777-0329
radoslaw.bodys@jpmorgan.com

Money and domestic credit

%oya, nsa, both scales



Monetary survey

Source: Czech National Bank (CNB)

Description: Four monthly monetary aggregates are distinguished, of which M2 is the most important one. On the asset side of financial institutions' balance sheets, domestic credit is split into credit extended to government, business, and households. In addition to the monthly accounts, a quarterly survey of assets and liabilities, profitability, and prudential strength of the banking sector is available.

Timing: The monthly monetary survey is published on the last working day of the following month. The quarterly data on the banking sector are published in the middle of the second month following the reference quarter.

Seasonal/focus: Not seasonally adjusted. Focus is on nominal over-year-ago growth of M2. Also closely watched are the data on private credit.

Revisions: None for the monetary aggregates. Minor for all the other components. The quarterly data on the banking sector are subject to continual revisions.

Comments: Given the huge portfolio cleanup operations of the formerly state-owned banks, private credit data are more meaningful when adjusted for write-offs of bad loans. Such data are available a monthly basis from the CNB on request, and quarterly, seasonally adjusted series are published in the *Inflation Report*.

State budget

Source: Ministry of Finance of the Czech Republic (MFCR)

Description: Cash-based monthly revenues and expenditures of the central government, disseminated on a cumulative basis in accordance with IMF standards.

Timing: Released on the first working day following the reference month.

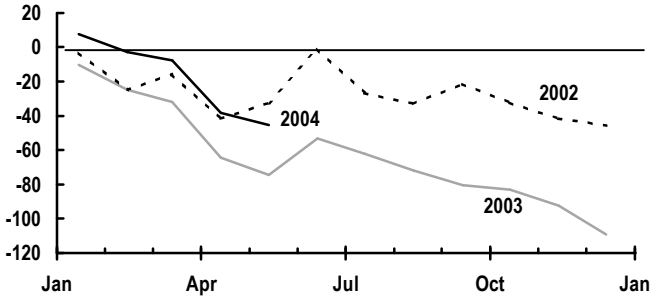
Seasonal/focus: Not seasonally adjusted. Focus is on the cumulative balance since the beginning of the year.

Revisions: Usually minor, but substantial revisions also have occurred in recent years.

Comments: The state budget still prevails in fiscal datawatching, even though it accounts for only about 60% of overall fiscal activity. More comprehensive data on the general government, which in addition to the state budget includes extra-budgetary funds, social security, and local budgets are only available annually and hence are not a big market mover. Nonetheless, they are important to study for structural changes in the public finances. Presently, the general government data are complied on a cash basis, but an accrual ESA-methodology is to be introduced soon.

State budget balance

koruny billion, nsa, cumulative year to date



JPMorgan Chase Bank, London
Nora Szentivanyi (44-20) 7777-3981
nora.szentivanyi@jpmorgan.com

Hungary

The monthly data cycle

Same month	Following month	Second following month
	First third	**First third**
	International reserves	Industrial production (prel)
	Gen. government budget (prel)	External trade
	Middle third	**Middle third**
	Consumer prices	Wages and employment
	Gen. government budget (final)	
Final third	**Final third**	**Final third**
	Monetary survey	Retail sales
	Unemployment	

The quarterly data cycle

	Third following month	Fourth following month
	Gross domestic product (prel)	
	Gross domestic product (final)	
	Balance of payments	

Sources of economic data releases

Central statistics office (KSH): Publishes statistics on inflation, production, unemployment, foreign trade, retail sales and gross domestic product. Provides data release calendar. http://www.ksh.hu

National bank of Hungary (MNB): Publishes statistics on monetary aggregates, international reserves and balance of payments. Provides data release calendar. Also provides schedule for the meetings of the NBH Monetary Council and monetary policy decisions. http://www.mnb.hu

Ministry of finance (MFCR): Publishes statistics on central and general government budget and financing. Provides data release calendar. http://www.pm.hu

Debt management agency (AKK): Publishes statistics on central government debt. http://www.allampapir.hu

JPMorgan Chase Bank, London
Nora Szentivanyi (44-20) 7777-3981
nora.szentivanyi@jpmorgan.com

Gross domestic product

Source: Central statistics office (KSH).

Description: Quarterly expenditure-based national accounts are provided at both current and constant (1995, 1998, and 2000) prices. Also included in the report are output-based accounts (at current and 1995 prices). Official time series are only available since 95Q1. The data are compiled in accordance with the ESA 1995 methodology and provide all standard details.

Composition of GDP
% of nominal total, 2003

Total expenditures	100	Total output	100
Consumption	79.2	Agriculture	3.4
Private	68.2	Industry	22.9
Social transfers	14.5	Construction	4.9
Government	11.0	Services	55.6
Investment	25.1	Trade and repairs	11.5
Fixed investment	22.0	Transport/comunication	7.2
Change in inventories	3.1	Financial services	19.0
Exports	61.8	Public adminstration	15.0
Imports	66.1	Other services	2.9

Timing: Preliminary information is published at the beginning of the third month following the quarter under review. Details appear at the end of the third month or the beginning of the fourth month after the reference quarter.

Seasonal/focus: Seasonally adjusted data are available for all expenditure and output-based GDP components (in 2000 prices only). Focus is on the preliminary over-year-ago GDP growth rate.

Revisions: Usually not substantial.

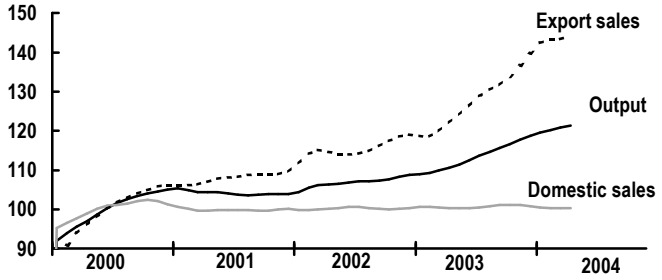
Comments: Despite being a lagging indicator of economic activity, this release is useful for cross-checking the central bank's private consumption (and hence inflation) projections and for analyzing growth drivers.

Industrial production

Source: Central Statistics Office (KSH).

Description: A monthly report of industrial production, measured as the net revenues from industrial sales adjusted for changes in the stock of output. The preliminary report contains: the unadjusted and wda oya growth rates and the m/m swda growth rate of total industrial output. The final report breaks down production by main sector: manufacturing (90% of the total), utilities, and mining. The report also includes detailed data on domestic and export sales. The stock of orders and new orders by selected industrial branches are also provided.

Hungary: industrial production and sales
2000=100, trend computed by the Statistics Office



Timing: Preliminary data are released in the first third of the second month following the reference month, and details in the middle of the second month.

Seasonal/focus: Seasonally and working day adjusted changes over the month are available. Focus is mainly on over-year-ago change unadjusted for the season but adjusted for working days.

Revisions: Revisions from the preliminary release tend to be infrequent and modest.

Comments: Industrial production is regarded as the most important monthly indicator of business activity. The final report also includes oya productivity growth in selected branches of industry (with productivity defined as output per employee) and industrial output by regions. Data on construction activity are covered in a separate report.

Unemployment

Source: Central Statistics Office (KSH).

Description: A monthly report of the number of people who actively seek work, based on the labor force survey results (which is a sample survey of 32,000 households conducted according to ILO definitions). The unemployment rate is the percent of unemployed in total labor force, reported as a three-month moving average. "Unemployed" are defined as those actively seeking work in the four weeks prior to being surveyed and willing to take a suitable job within two weeks.

Timing: Released at the end of the month following the reference period.

Seasonal/focus: Official data are not seasonally adjusted.

Revisions: There are no revisions.

Comments: Also available within the report are the number of employed, number economically inactive, and employment and participation rates.

JPMorgan Chase Bank, London
Nora Szentivanyi (44-20) 7777-3981
nora.szentivanyi@jpmorgan.com

Retail sales

Source: Central statistics office (KSH)

Description: A monthly measure of turnover at enterprises that operate retail outlets. The KSH publishes separate indices for total retail sales and retail sales excluding the automotive segment. A trend measure is also available for the latter, defined as a 4-month moving median.

Timing: Released in the final third of the second month following the reference period.

Seasonal/focus: Seasonally and working-day adjusted month-on-month volume changes, and working-day adjusted over-year-ago volume changes are provided. Focus is, however, on the unadjusted changes.

Revisions: Usually small.

Comments: The report serves as an indicator of household consumption expenditure. The sample of surveyed outlets is changed once a year. To make that change, January retail sales publications are delayed by one month and are released along with the February report.

External trade (customs data)

Source: Central statistics office (KSH).

Description: A monthly report of the value of monthly exports (f.o.b) and imports (c.i.f), based on goods crossing the customs frontier. Data are reported at current prices in forints, euros and US dollars. Breakdown by main product (including SITC categories) and country groups is included.

Timing: Released in the first third of the second month following the month under review.

Seasonal/focus: No official seasonally adjusted data are available. Focus is mainly on over-year-ago changes in exports and imports, and the trade balance.

Revisions: Owing to slow processing of customs declarations, the data are revised nearly every month. The revisions are almost always upward and often sizeable. For this reason, the KSH publishes an estimate of the final export and import data based on anticipated revisions. These estimates of the final data have been fairly accurate in the past.

Comments: Since 2003, the customs trade data have received increased market attention, because they are available before the trade figures in the balance of payments report (for which a preliminary figure is no longer published), and thus serve as basis for estimating the latter. However, different methodologies (see below) mean that the bop trade balance (published by the NBH) shows a systematic surplus over the KSH data.

Balance of payments

Source: National Bank of Hungary (NBH)

Description: A quarterly report with a detailed breakdown of the current, capital, and financial accounts in both forint and euro terms. Data are compiled following the 5th edition of IMF Balance of Payment Manual.

Timing: Released at the end of the third month following the quarter under review.

Seasonal/focus: The NBH has an official seasonally adjusted time series for the balances on trade, travel, services, and overall current account. Focus is on the current account balance and FDI.

Revisions: Quarterly data are revised twice per year; customs trade data are revised in agreement with the revisions made by the Statistics Office.

Comments: From 2003, the data on trade in goods is based on customs data (rather than the cash data used previously). However, there is still a discrepancy between the trade data published by the NBH and those of the KSH because of methodological differences (e.g., both exports and imports are valued at f.o.b in the NBH trade data). As a result, the NBH's trade balance shows a systematically lower deficit by about €100 million. Since March 31 2004, in accordance with international methodological standards, the balance of payments includes reinvested earnings, which boosts the current account deficit and the capital account (FDI) by roughly 2.7% points of GDP.

Consumer price index

Source: Central statistics office (KSH).

Description: A monthly index calculated as the fixed-weight average of 156 main product categories (approximately 1,100 individual goods and services). The CSO publishes three types of indices, which measure price change relative to the previous month, December of the previous year, and the corresponding month of the previous year. The KSH reports data both based on its own classification and COICOP methodology. Weights are calculated using the household budget survey of two years earlier. A core index is published separately (see below).

Composition of CPI*

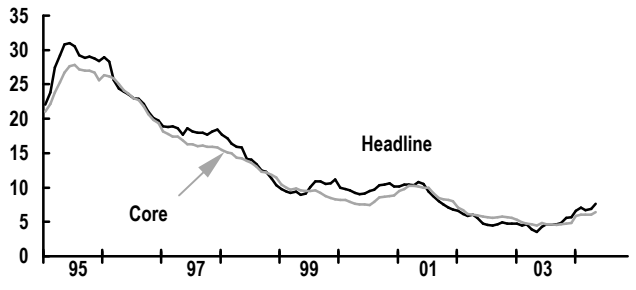
% weighting during 2004

Total	100.0
Foods	18.4
Industrial products	26.6
Market services	19.0
Market energy	1.7
Alcohol and tobacco	9.6
Fuel	4.6
Regulated goods and services	20.2

*NBH classification

JPMorgan Chase Bank, London
Nora Szentivanyi (44-20) 7777-3981
nora.szentivanyi@jpmorgan.com

CPI in perspective



Timing: Prices are measured between the 1st and 20th calendar day of each month, and include taxes. Released in the middle third of the month following the reference month.

Seasonal/focus: Data are not seasonally adjusted. Focus is on the headline CPI over-year-ago change.

Revisions: None.

Comments: A third type of classification exists (computed by the NBH) which is more suitable for analytical and forecasting purposes as the categories are based on the economic developments underlying price changes. In addition, the KSH (jointly with the NBH) publishes a core inflation indicator, which excludes unprocessed food, motor fuels, products with regulated prices and market energy from the CPI (but includes indirect tax changes). Core inflation accounts for 65.8% of the total CPI. While market observers pay more attention to headline CPI inflation because this is the measure that the NBH's monetary policy officially targets, the core indicator is still a very useful indicator of underlying price pressure and is followed closely. Following the indirect tax hikes implemented at the start of 2004, the KSH (jointly with the NBH) has also started to publish since April a "constant tax rate price index", which eliminates the impact of tax rate changes (versus December of the previous year) from the CPI.

Employment and wages

Source: Central statistics office (KSH)

Description: A monthly report that features average monthly wages (both gross and net) for the overall economy, the public sector (30% of total employees) and the private sector (70% of the total). It also includes employment data for the whole economy and a breakdown of employment by sectors and industrial branches (serving as a basis for the industrial productivity data). The KSH also publishes an annual growth figure for real wages, deflated using the CPI.

Timing: Released in the middle part of the second month following the reference period.

Seasonal/focus: Data are not seasonally adjusted. Focus is on the over-year-ago change (both nominal and real) in monthly wages in both public and private sectors.

Revisions: Usually minor.

Comments: The NBH estimates private sector wage inflation indices based on the KSH data, which in turn are indicative of price pressures in the economy.

General government budget

Source: Ministry of Finance of Hungary (MoF)

Description: A monthly report of general government finances. Data are cash-based, disseminated on a cumulative basis in accordance with IMF standards. The general government includes the state budget, extra-budgetary funds, social security (health care and pensions) and local governments. However the latter are only reported at year end.

Timing: The preliminary, headline figures are released in the first week following the reference month. The final, detailed report is typically released one week later.

Seasonal/focus: Data are not seasonally adjusted. Focus is on the cumulative balance since the beginning of the year.

Revisions: None.

Comments: Starting in 2003, the MoF also releases approved annual budget revenue, expenditure and balance targets according to ESA (accrual-based) methodology, but there is no straightforward-way of tracking ESA budget performance from the monthly cash-based data. Since the second half of 2003, the MoF announces its estimate of the following month's budget balance when the detailed report for the previous month is released. In a bid to enhance transparency and credibility, since March 2004, the MoF publishes quarterly budget projections (including main expenditure and revenue categories) for the full year ahead.

JPMorgan Chase Bank, Warsaw
Radoslaw Bodys (48-22) 520-5102
radoslaw.bodys@jprmorgan.com

Poland

The monthly data cycle

Same month	Following month	Second following month
First third	**First third**	**First third**
Middle third	**Middle third**	**Middle third**
	Monetary survey	Balance of payments
	Employment/wages	
	Consumer prices (CPI)	
	State budget	
	Industrial output	
	Construction output	
	Producer prices (PPI)	
Final third	**Final third**	**Final third**
Business survey	Statistical Bulletin	
Food prices, H1	Unemployment	
	Retail sales	
	Core inflation	

The quarterly data cycle

Second following month	Third following month
GDP - early estimate	GDP - detailed report

Sources of economic data releases

Central statistics office (GUS): Publishes data on national accounts, inflation, production, foreign trade (customs), retail sales, as well as employment/wages and business surveys. The website with statistical information, access to data, and release calendar is: http://www.stat.gov.pl The main publication is the monthly *Statistical Bulletin*, published in the final third of the month following the reported month.

National Bank of Poland (NBP): Publishes balance of payments, monetary aggregates, and core inflation data. The website with statistical information and release calendar is: http://www.nbp.pl NBP also provides schedule for, and minutes from the NBP's Monetary Policy Council (RPP) meetings. The main publications are *Information Bulletin* (monthly), and *Inflation Report* (quarterly).

Ministry of Finance (MoF): Publishes statistics on central budget and public debt stock data. The website with statistical information, release calendar and occasional publications is: http://www.mf.gov.pl

JPMorgan Chase Bank, Warsaw
Radoslaw Bodys (48-22) 520-5102
radoslaw.bodys@jprmorgan.com

Gross domestic product

Source: Central statistics office (GUS).

Description: Instead of complete national accounts, Poland publishes selected quarterly indicators, including gross domestic product, gross value added (87% of GDP in 2003; excludes intermediate consumption), private consumption, and gross fixed capital formation. The aggregates are released at current prices and as price adjusted indices. The output side is further divided into industry, construction, and market services. Since 2000 national accounts data are compiled in accordance with the ESA 1995 methodology.

Composition of GDP
% of nominal total, 2002

Expenditure	
Total GDP	100.0
Consumption	83.7
Private	65.1
Government/Non-profit*	18.5
Investment	18.8
Fixed investmnent	18.4
Change in inventories*	0.4
Output	
Total GDP	100.0
Industry	21.6
Construction	5.0
Services	44.4

*implied

Timing: The preliminary GDP estimate is announced at the GUS end-month press conference two months after the end of the reference quarter. A second estimate and selected components of GDP are released four weeks later.

Seasonal/focus: No seasonally adjusted data available. Focus is mainly on unadjusted over-year-ago changes.

Revisions: Can be substantial.

Comments: Although it provides a rather delayed account of the state of the economy, markets watch this indicator for its comprehensiveness and use it to cross-check the central bank's growth projections.

Industry report

Source: Central statistics office (GUS).

Description: The report provides monthly production volumes for all major areas of industry: manufacturing (83.0% of total industrial output in 2003), utilities (12.1%), and mining (4.9%). Construction is measured separately.

Timing: Published in the third week of the month following the reported month. Industrial sales are put out separately a week later in the monthly *Statistical Bulletin*.

Seasonal/focus: Since 2003, GUS publishes seasonally and working-day adjusted (swda, TRAMO/SEATS) data along with the release of the headline (nsa) data. Focus has been, therefore, gradually shifting from the over-year-ago (nsa) change, to seasonally and working day-adjusted data.

Revisions: Can be sizable.

Comments: The production volumes get the most popular attention, as the best timely indicator of economic activity in Poland. The industrial sales data receive much less publicity. While Polish industry data are among Europe's timeliest, they are also among the most volatile. Changes in holiday patterns and purely statistical disturbances can lead to huge monthly fluctuations.

Business survey

Source: Central statistics office (GUS).

Description: There are three major official monthly surveys of business directors: on manufacturing, on construction, and on retail sales. Indices on the overall business climate and more detailed company forecasts for business tendency are derived monthly from the responses of the surveyed enterprises' directors to all three surveys separately (no composite confidence indicator is made available).

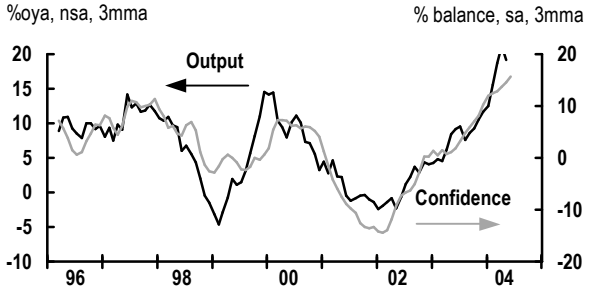
Timing: Published in the third week of the reference month.

Seasonal/focus: Seasonally adjusted data are available in the monthly *Statistical Bulletin*, released about a week after the publication of unadjusted figures. Focus is mainly on confidence in manufacturing.

Revisions: None.

Comments: Despite seasonal adjustment (X-11 ARIMA), the monthly fluctuations in the survey are sizable, impairing its value as a short-term indicator. A correlation of the eco-

Confidence and output in industry



JPMorgan Chase Bank, Warsaw
Radoslaw Bodys (48-22) 520-5102
radoslaw.bodys@jprmorgan.com

nomic and turnover indicators with annual output growth can be found in the longer term, but it is hard to base strong conclusions on the monthly readings of the surveys. This is particularly true of the survey on retail sales, which is additionally impaired by the rapid structural changes in the retail sales network. In addition, since 2003 the NBP has published its own quarterly business survey report (available only in Polish). While arguably the most comprehensive survey on economic activity in Poland, its value is limited by the very short time series: major components of the survey are available only from 00Q1.

Registered unemployment

Source: Central statistics office (GUS).

Description: This monthly report gives the number of unemployed (as registered at district labor offices) and the corresponding unemployment rate. The data on registered unemployed persons include persons having no employment and not attending any full-time school, and who are capable of work, ready to accept full-time employment, registered at a district labor office, and age 18 or more. Since 1997 persons who receive unemployment or preretirement benefits and those in job training programs are *not* counted as the unemployed and are excluded from the register.

Timing: Released in the *Statistical Bulletin* in the fourth week of the month following the reported month.

Seasonal/focus: No official seasonal adjustment is available. The headline number is the unemployment rate.

Revisions: Occasional and usually modest. An exception was the 2003 revision, which boosted 2001-03 unemployment rate by around 2% points after the National Census 2002 revealed that the labor force in agriculture had sharply declined compared with the previous Census (1996).

Comments: The impact of government programs and economic restructuring impairs the report's value for gauging the trend in labor markets. In addition to this monthly survey, the GUS also publishes a quarterly labor force survey with employment and unemployment data. (The LFS unemployment rate in 03Q4 was 19.3% vs. the registered unemployment rate of 19.6%.)

Retail sales

Source: Central statistics office (GUS).

Description: Reports monthly sales by retailers, covering consumer and nonconsumer goods. The report is detailed by store type and assortment groups. No deflator is provided and results are published in the form of monthly and annual growth rates at current prices.

Timing: Released in the *Statistical Bulletin* four weeks after the reported month.

Seasonal/focus: Neither shopping day nor seasonal adjustment are provided.

Revisions: Occasional and usually modest.

Comments: Although conceptually an important statistic, the retail sales report still gets little attention in Poland. This reflects largely the rapid structural change in the retail sector (a shift from small ''family shops,'' not included in the retail sales reports, to shopping centers) and the lack of a meaningful deflator for the nominal indices. Approximations through the goods component of the CPI have in the past produced implausibly high growth rates in real sales.

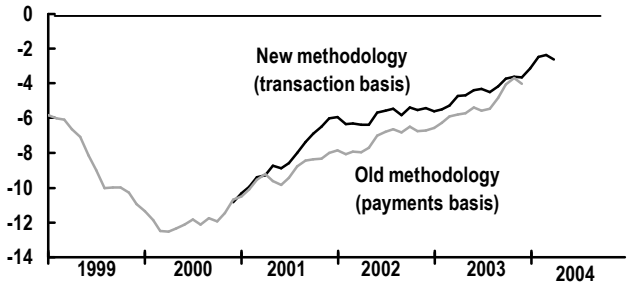
Balance of payments

Source: National Bank of Poland (NBP).

Description: The monthly balance of payments is one of Poland's key economic reports. It details the current, financial, and capital accounts by all major components. Since 2004 (with the comparable data available since 2000) the monthly balance of payments is compiled on the basis of settlements recorded by Polish banking system between Polish residents and the rest of the world *and,* in part, inter-

Current account balance

EUR billion, 12-month sum



JPMorgan Chase Bank, Warsaw
Radoslaw Bodys (48-22) 520-5102
radoslaw.bodys@jprmorgan.com

polated from corporates' quarterly customs reports. This transactions-based approach, as opposed to the previous one (based *exclusively* on settlements recorded by the Polish banking system), eliminates one of the major drawbacks of the previous approach, namely that transactions not recorded by the banking system were not covered by the balance of payments reports. Since early 2003, the data are published in euro terms (previously in US dollars).

Timing: Released in the middle of the second month following the reference month.

Seasonal/focus: The data are not seasonally adjusted. Focus is typically on the headline current account balance, the annual growth rate of merchandise exports and, sometimes, on net foreign direct investment, and portfolio investments.

Revisions: Can be large.

Comments: The balance of payments data can be misleading for tracking trends in external trade for two reasons. First, because the data are reported in nominal terms with no deflator or even trade price indicator given. Second, because invoices and payments picked up in the banking data tend to lag shipments substantially. (This drawback was *partially* removed by the introduction of a transaction-based approach since 2004, yet the fact that monthly data are partially interpolated from corporates' *quarterly* customs reports make it still intact). This fact, together with the absence of seasonal and working-day adjustments, implies that it can take up to a year before a change in the trend of external trade is clearly indicated.

Consumer price index

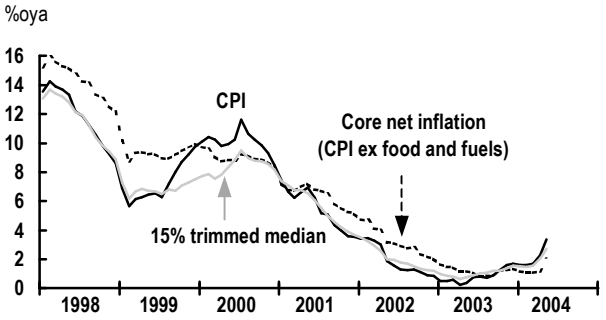
Source: Central statistics office (GUS).

Description: A monthly index of consumer prices, computed in accordance with the COICOP/HICP methodology since 1999. The CPI is a fixed-weighted index calculated on a consumer basket that currently includes around 1,800 goods and services. The CPI basket is re-weighted every year to reflect the most recent consumption structure.

Composition of the CPI
% of total, 2003 CPI basket

Total	100.0
Food, non-alcoholic beverages	26.9
Alcohol beverages, tobacco	6.0
Clothing and footwear	5.4
Housing, water, energy, fuel	21.2
Furnishing, households	4.9
Health	5.0
Transport	8.4
Post and telecommunication	4.9
Recreation and culture	6.4
Education	1.5
Restaurants and hotels	3.9
Miscelleneous goods/services	5.5

Polish consumer prices inflation in perspective



Timing: The release comes late by international standards, in the middle of the month following the reported month. However, a report on the large food and beverages component is published one week after the measured fortnight. This report gives only a reduced-sample measure of food prices, however, and in addition since 2004 is published only for the first half of the month (previously: biweekly).

Seasonal/focus: Data are not seasonally adjusted. Focus is on the headline CPI over-year-ago change.

Revisions: None. Only January and February data are revised alongside with the March report to reflect reweighting of the basket.

Comments: To support the monetary policy process, the NBP started in 2002 to publish five different measures of core inflation based on a reaggregation of the GUS CPI data. The core CPI series are released on the NBP's website about two weeks after the release of CPI by the Statistics Office. The NBP and hence the market observers pay particular attention to so-called ''core net inflation" (CPI ex food and fuels) and to the "15%-trimmed median."

Employment and wages

Source: Central statistics office (GUS).

Description: Timely data on monthly wages (gross, per employee), and on employment are compiled for the enterprise sector only. Average wage and employment series for the public sector and for the whole economy are published **quarterly in the** *Statistical Bulletin*.

Timing: Headline wage and employment growth are typically released around the 15th of the month following the reference month. Detailed data are released with the official monthly *Statistical Bulletin*.

Seasonal/focus: Data are not seasonally adjusted. Focus is on the over-year-ago changes in wages and employment.

JPMorgan Chase Bank, Warsaw
Radoslaw Bodys (48-22) 520-5102
radoslaw.bodys@jprmorgan.com

Monetary survey

Source: National Bank of Poland (NBP).

Description: Since March 2003, monthly monetary statistics are compiled in accordance with the ESA 1995 methodology (comparable series are available since December 1996). In addition, comprehensive data on structure, provisions, and classified loans of the banking sector are provided by the biannual *Summary evaluation of the financial situation of Polish banks* (Polish version available on a quarterly basis).

Timing: Measured at the end of the reference month. Released within 15 days after the reference month.

Seasonal/focus: Data are not seasonally adjusted, but seasonal adjustment factors are available in the monthly *Information Bulletin*. Focus is on nominal over-year-ago growth of M3 and on private credit.

Revisions: Tend to be minor.

Comments: Occasionally the NBP comments on the release of the monetary survey. A stable relationship between monetary aggregates and nominal GDP and inflation has not been established so far, reflecting the continued structural change of the banking sector.

State budget

Source: Ministry of Finance (MoF)

Description: Cash-based monthly information on central government revenues, spending, and the sources of financing are provided, along with details for the main items. The report does not strictly follow international methodological standards. (Separately, and with a two-month delay, the *Statistical Bulletin* publishes state budget statistics in accordance with the IMF's GFS standard.)

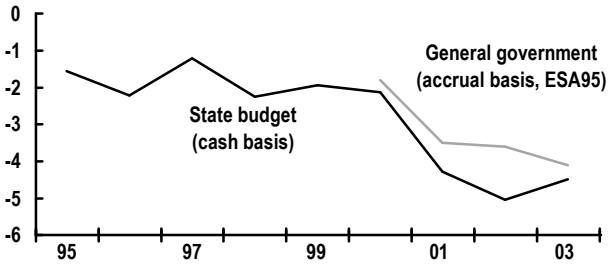
Timing: Released around the 15th of the month following the reference month.

Seasonal/focus: Data are not seasonally adjusted. Focus is on the headline deficit. In addition, cumulative deficit to date as a share of the full-year plan total is published.

Revisions: None.

Comments: The rapid changes in the Polish public sector—particularly devolution, tax reform, and social security reform in 1999—make it hard to compare data for different fiscal years. Nonetheless, with Poland EU entry in 2004, more comprehensive general government fiscal data based on accrual ESA95-based methodology is being introduced (annual ESA-based fiscal deficit data are available since 2000). At this stage, ESA95 deficit is made public annually, in the third month following the reported year.

Fiscal deficits



JPMorgan Chase Bank, London
Nora Szentivanyi (44-20) 7777-3981
nora.szentivanyi@jpmorgan.com

Slovak Republic

The monthly data cycle

Same month	Following month	Second following month
First third	**First third**	**First third**
	Consumer prices	Industrial production
Middle third	**Middle third**	**Middle third**
	Unemployment	
Final third	**Final third**	**Final third**
Economic sentiment	Merchandise trade	Balance of payments

The quarterly data cycle

First following month	Second following month	Third following month
		Gross domestic product

Sources of economic data releases

Statistical Office of the Slovak Republic (SUSR): Publishes statistics on Slovak inflation, production, unemployment, foreign trade, and retail sales. Provides information on methodology. http://www.statistics.sk

National Bank of Slovakia (NBS): Publishes statistics on monetary aggregates, balance of payments, and its monthly and annual reports. Also provides schedule for the meetings of the NBS Bank Board and statements on monetary policy decisions. http://www.nbs.sk

Ministry of Finance (MFSR): Publishes statistics on central and general government budget and debt stock. http://www.finance.gov.sk

JPMorgan Chase Bank, London
Nora Szentivanyi (44-20) 7777-3981
nora.szentivanyi@jpmorgan.com

Gross domestic product

Source: Statistical Office of the Slovak Republic (SUSR).

Description: Quarterly expenditure-based national accounts are provided in both nominal and real (1995 prices) terms. The data are compiled in accordance with the ESA 1993 methodology and provide all standard details.

Composition of GDP
% of nominal total in 2003

Total GDP	100
Consumption	77
Private	56
Government	20
Nonprofit institutions	1
Investment	25
Fixed investment	26
Change in inventories	-1
Exports	78
Imports	80

Timing: Preliminary estimates are released 80 days after the reference quarter.

Seasonal/focus: Seasonally adjusted data are available four months after the end of the reference quarter. Focus is on unadjusted oya changes.

Revisions: Can be substantial.

Comments: Markets watch this indicator despite its delayed account of the state of the economy.

Economic sentiment

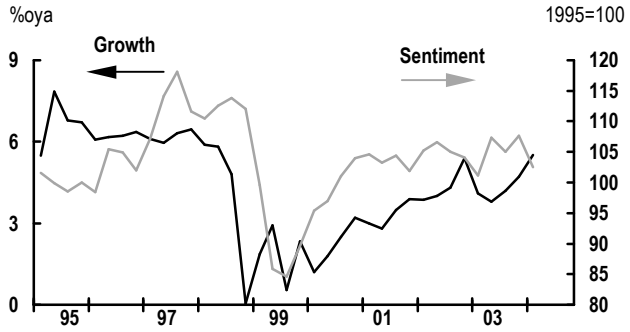
Source: Statistical Office of the Slovak Republic (SUSR).

Description: The overall economic sentiment index (2000=100) is the weighted arithmetic average of four components: industrial confidence (40%), construction confidence (20%), retail trade confidence (20%), and consumer confidence (20%). The confidence indicators are percent balances from business tendency surveys, which cover both current conditions and expectations.

Timing: Released four weeks after the end of the reference month.

Seasonal/focus: All indicators are seasonally adjusted.

Real GDP growth and economic sentiment



Revisions: None.

Comments: The most timely leading indicator of the economy.

Industrial production

Source: Statistical Office of the Slovak Republic (SUSR).

Description: A monthly report on volume of production and value of sold output for manufacturing, mining, and utilities. The IP index is published with reference to the average month of 2000 as well as in the form of over-year-ago changes. The details include output and sales by 17 industrial divisions. Construction activity is reported separately.

Timing: Preliminary estimates are released six weeks after the end of the reference month.

Seasonal/focus: Working-day adjusted production, but not sales, data are available. Seasonally adjusted indices are not yet published. Focus is mainly on over-year-ago change adjusted for working days.

Revisions: Can be substantial.

Comments: Slovak industrial output is dominated by a very small number of big enterprises and therefore data can be highly volatile from month to month.

Registered unemployment

Source: National Labor Office (monthly), Statistical Office of the Slovak Republic (quarterly).

Description: A monthly registered unemployment number is available in addition to the quarterly unemployment data based on the Labor Force Survey (LFS). The monthly data cover people who actively seek work through a labor office and the registered unemployment rate calculates those people as a percentage of the total labor force. By contrast, the LFS uses the ILO approach and defines the unemployment rate as the percentage of economically active persons who are unemployed.

Timing: The monthly data are usually released on the 20th of the month following the reference month.

Seasonal/focus: The registered unemployment series is not officially seasonally adjusted. However, seasonally adjusted quarterly (LFS) data are available three months after the end of the reference quarter.

Revisions: The data are final when released

JPMorgan Chase Bank, London
Nora Szentivanyi (44-20) 7777-3981
nora.szentivanyi@jpmorgan.com

Merchandise trade (customs data)

Source: Statistical Office of the Slovak Republic (SUSR).

Description: A monthly report of imports, exports, and the balance of merchandise trade, reported in f.o.b. values in local currency only. Breakdowns are provided by major trading partners and types of goods. The data are published for the reference month as well as cumulatively from the beginning of the year.

Composition of exports	
% of merchandise exports in 2003	
Exports to all destinatins	100
EU-15	60.6
Germany	30.8
CEFTA	25.2
Czech Republic	12.9
US	5.3
Asia and Africa	3.2
Exports of all goods	100.0
Transport equipment	29.0
Machinery, electrical eqiupment	18.8
Base metals	13.5
Mineral products	6.0
Plastics	5.2
Textiles	5.1

Timing: Released within five weeks after the reference month ends.

Seasonal/focus: Seasonally adjusted data are not available.

Revisions: Every month; usually modest.

Comments: Since currency movements are key to monetary policy, and foreign trade is a principal influence on the exchange rate, this is one of the indicators most closely followed by both the central bank and market participants.

Balance of payments

Source: National Bank of Slovakia (NBS).

Description: Detailed monthly data on both the current and capital and financial accounts are compiled according to IMF guidelines (fifth edition of the manual). Data are reported in cumulative year-to-date terms in SKK and US dollars.

Timing: Preliminary data are released within two months after the reference month ends. Quarterly data are released within one month following the end of the reference month and final data are disseminated approximately ten months after the end of the reference year.

Seasonal/focus: Seasonally adjusted data are not available.

Revisions: Annual; usually modest.

Comments: The markets track the customs trade data rather than the balance of payments report because the former are available a month earlier and the current account closely follows the trade balance.

Consumer price index

Source: Statistical Office of the Slovak Republic (SUSR).

Description: A monthly index of prices (2000=100), compatible with international standards and the COICOP methodology. The Slovak CPI is a fixed-weighted index calculated on a consumer basket that comprises over 700 selected goods and services. The SUSR publishes breakdown of CPI into regulated prices, indirect tax changes, and "core" inflation (i.e. CPI ex regulated prices and indirect taxes). The "core" inflation index is further divided into the food and nonfood components. The latter (that is, unregulated nonfood items) is referred to as "net" inflation.

Composition of CPI	
% weighting	
Consumer prices	100
Food	23.6
Alcohol and tobacco	7.0
Clothing and footwear	7.5
Housing and utilities	21.5
Furnishing and household equipment	5.2
Health care	1.5
Transport	9.3
Communication	2.7
Recreation and culture	7.2
Education	0.52
Hotels, cafes and restaurants	7.22
Miscellaneous goods and services	6.79

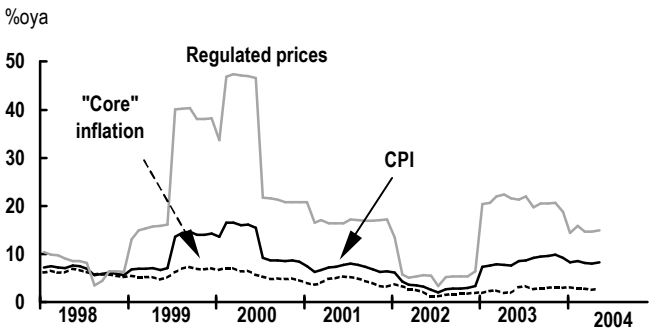
Timing: Released four working day after the end of the month. Measured between 1st and 20th calendar day of the reference month (fuel prices are collected three times per month: on the 1st, 10th and 20th).

Seasonal/focus: Data are not seasonally adjusted. Focus is on the headline and "core" CPI over-year-ago changes.

Revisions: None.

Comments: "Core" inflation (CPI excl. regulated prices and indirect tax changes) is the main inflation measure targeted by the NBS since 2000. Prior to that, the NBS targeted "net" inflation. Note that Slovak "core" inflation corresponds to what is defined as "net" inflation in the Czech Republic.

Consumer price inflation in perspective



JPMorgan Chase Bank, Hong Kong
Ben Simpfendorfer (852) 2800 7005
ben.simpfendorfer@jpmorgan.com

China

The monthly data cycle

Same month	Following month	Second following month
	First third	
	Industrial production	
	Middle third	
	Retail sales	
	Fixed investment	
	Foreign direct investment	
	Merchandise trade	
	Consumer price index	
	Monetary aggregates	

The quarterly data cycle

Following month	Second following month	Third following month
Middle third		
Gross domestic product		

JPMorgan Chase Bank, Hong Kong
Ben Simpfendorfer (852) 2800 7005
ben.simpfendorfer@jpmorgan.com

Gross domestic product

Source: National Bureau of Statistics.

Description: GDP is reported on a supply-side basis quarterly and annually, and on a demand-side basis annually. Only nominal levels are reported. Real annual changes are reported by supply-side GDP on a quarterly and annual basis. The deflators are not separately reported. JPMorgan calculates its own real levels for supply-side GDP (1998=100) using the reported real annual change to calculate a real level. Real annual levels for demand-side GDP (1990=100) are calculated using the indices of consumer prices, investment goods prices, and prices of Hong Kong's imports and exports from China as proxy deflators.

Supply-side GDP in fact is calculated using a combination of production and income-side data. While similar methods are adopted by other countries, China's approach results from its transition from command to market-based economy and the limitations this imposes on data collection; as a rule, the production approach is used to measure output in the traditional economy, and the income approach in non-traditional sectors. An exception is agriculture, which is measured by income.

The production approach is a legacy of China's command economy: it relies heavily on direct reporting by industrial enterprises to the National Statistical Bureau. It is similar in style to the old Material Product System, and is most applicable to state-owned enterprises, especially in industry. The Statistics Bureau subtracts the value of intermediate inputs from gross output value to calculate value-added for each enterprise. Where the value of inputs is not available, value added is calculated using a standard multiplier, based on surveys of the state sector.

Where gross output value is not available, the income approach is used. This relies on surveys and estimates rather than direct reporting: the Bureau aggregates the value of labor remuneration, net production taxes, depreciation, and operating surplus. This approach is most applicable to the agricultural, tertiary, and private enterprise sectors, which traditionally did not report directly to the Bureau. Data collected this way are generally less reliable than those collected using the production approach.

The expenditure-based approach to measuring GDP is also fraught with problems. The most reliable components are the estimates of consumption and investment. Consumption spending is generally believed to be underreported, as the system fails adequately to account for the value of subsidized goods and services provided by the state. The GDP measure of fixed investment is based on historical cost, as opposed to current costs, while it is also assumed to exclude investment outlays by unincorporated businesses, mainly small-scale service providers. Data on net exports and inventories are most problematic owing to poor reporting. They appear to be calculated as residuals from the production-based GDP data, less consumption and fixed investment.

China has increased its use of decennial censuses to capture changes in the economy, and to improve the accuracy of surveys and estimates used to calculate GDP. During each ten-year period, China conducts six censuses: a population census in years with a last digit of 0; a tertiary sector census in years with a last digit of 3; an agricultural census in years with a last digit of 7; an industrial census in years with last digits of 3 and 8; and finally, a census of basic statistical units in years with last digits of 1 or 6.

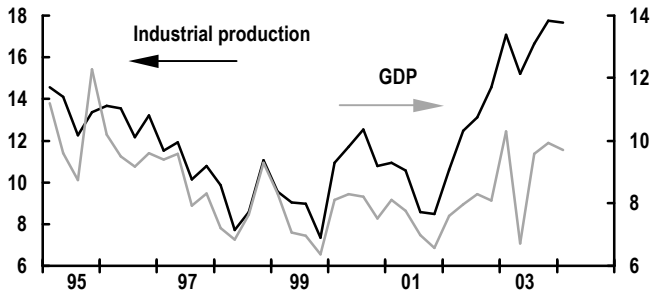
And finally, China will no longer report monthly GDP figures on either a national and provincial level, with the exception of extraordinary circumstances. Although this had been done on an *ad hoc* basis, the short period between release date and the reference period undermined confidence in the quarterly and annual GDP data.

Timing: Quarterly figures are generally released in the second week of the following month.

Starting 2003, a preliminary annual figure is to be released twenty days after the end of the year, in line with IMF guidelines. Previous practice was for the preliminary figure to be released in the final week of the same year. A first estimate is published in February or March of the following

Real industrial production and GDP

%oya, both scales



Composition of GDP

percent share of nominal value, 2002

Supply basis		Expenditure basis	
Primary	14.5	Private Consumption	45.3
Secondary	51.7	Rural	19.7
Industry	44.9	Urban	25.5
Construction	6.9	Govt Consumption	13.0
Tertiary	33.7	Fixed Investment	39.3
Transportation	5.4	Change In Stocks	0.1
Retail and service trade	8.0	Net exports	2.4

JPMorgan Chase Bank, Hong Kong
Ben Simpfendorfer (852) 2800 7005
ben.simpfendorfer@jpmorgan.com

year. A first confirmed estimate is published in the Statistical Yearbook in September of the following year, and a second confirmed estimate is published in the second following year.

Seasonal/focus: No seasonally adjusted data are provided. JPMorgan calculates its own X-12 ARIMA seasonally-adjusted series.

Revisions: Quarterly and annual data are generally revised in the following year. Previously, revisions were usually restricted to the nominal levels; the last revision made to a real annual growth rate was in 1993. This looks set to change, however, as the State Statistics Bureau announced in November 2003 that it would start providing revised estimates of real growth in subsequent years.

A major census of tertiary sector activity was due to be completed in 2003. The census will provide a better guide as to the full extent of tertiary sector activity and, consequently, may result in significant revisions to previous years' data.

Comments: There are many issues surrounding use of China's national accounts data. The following are a few useful principles:

First, the sum of provincial GDP figures generally exceeds the national total. This anomaly is often cited as evidence that the data are flawed. However, it also shows that the National Statistics Bureau recognizes problems in the reporting at the provincial level, and uses random surveying to adjust the data (termed "squeezing the water out").

Second, the risk that real GDP growth is overstated or understated on account of unreliable deflators has become less significant with the decline in inflation. (While an official deflator is not reported, the annual CPI has risen only 0.2% on average since 1997.) Real growth rates prior to 1997 are subject to greater uncertainty, given the high inflation rates in some of those years.

Third, the statistical system has struggled to keep abreast of economic changes. As a rule, the data are a more accurate measure of the traditional economy than the of the new economy; the older, production-based data collection is more accurate than the income-based system. While this discrepancy is narrowing owing to the greater use of surveys and censuses, it does result in statistical quirks.

Most important, the first three quarters' readings are likely to be weighted towards activity in the industrial and state-owned sectors, for which the data are better. Data on the tertiary, agricultural, and private enterprise sectors become more generally available towards year end. Thus, the fourth quarter's GDP reading has the lowest correlation with industrial output, as it corrects for the earlier exclusions.

Finally, China's parallel economy is undoubtedly significant. The OECD estimates that undeclared output is an average 17.5% of total output among OECD countries; that share is sure to be much higher in China. And, since most of the undeclared activity is likely to be in the dynamic private sector, its partial exclusion may result in more significant underreporting of GDP growth than elsewhere.

The upshot is that China's growth figures are more difficult to interpret than most. However, the known biases are not in one direction: while critics argue that provincial authorities and managers of state firms likely exaggerate their figures, the offsetting underreporting due to excluded private sector activity may be increasingly important.

Industrial production

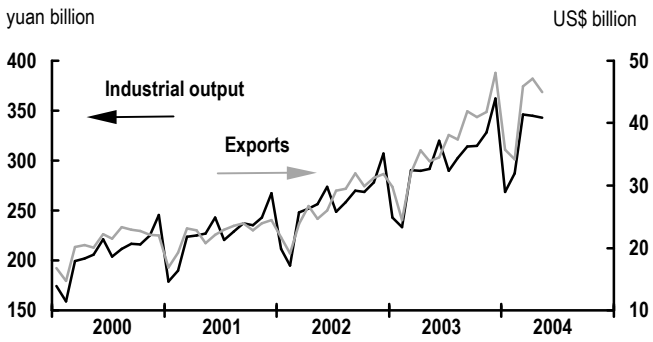
Source: National Bureau of Statistics.

Description: A monthly survey of value added at industrial establishments, reported as a nominal level and real annual change. JPMorgan calculates a real monthly level by, first, using the producer price index to deflate 2000 data and, then, deriving a historical series using the real annual change and 2000 as the base year.

Covers all industrial enterprises on a consolidated basis, to avoid risk of double-counting. From 1998, data exclude all nonstate enterprises with sales of less than Y5 million.

Data are first broken down into registration-based categories. When ownership encompasses two or more of these categories, output is attributed proportionally to each category based on equity share. For example, when the state and private sector own even shares in a firm, both the state and private ownership categories would be attributed with half the output of that firm. However, in practice, firms in which the state has a controlling interest are counted as fully-state owned. Moreover, where the state has a minority interest, the firm's total output is first recorded as either a joint-owned or limited liability company and then output

Industrial output and merchandise exports



JPMorgan Chase Bank, Hong Kong
Ben Simpfendorfer (852) 2800 7005
ben.simpfendorfer@jpmorgan.com

equivalent to the state's equity share is counted a second time in the state-owned category, with the result that state-sector output is inflated. This also means that aggregate output by registration is greater than total output.

Timing: Generally released in the second week of the following month.

Seasonal/focus: No seasonally adjusted data are released. Morgan calculates its own X-12 ARIMA seasonally-adjusted series. Output is seasonally strong during the second and fourth quarters of the calendar year. The first two months of the year are typically weak, because of the Chinese new year. The focus is on annual changes.

Revisions: Rare and small.

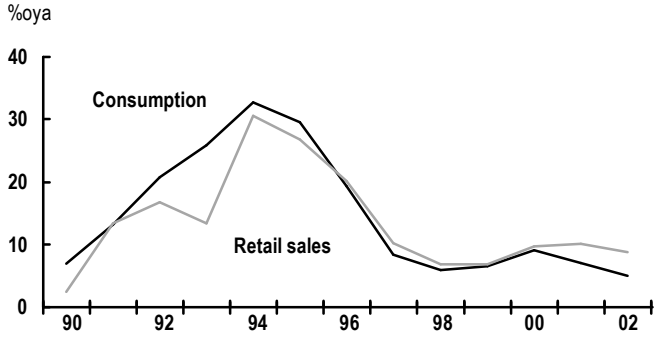
Comments: Watched by the market as a proxy for the quarterly supply-side GDP figures, although the correlation between the two has weakened of late in terms of growth rates. While the annual change is the key focus, JPMorgan uses its seasonally adjusted data to gauge sequential momentum. But, as with all Chinese data, even seasonally adjusted figures can be volatile, particularly around the Chinese new year period—although not as unreliable as the data on merchandise trade, which are closely correlated with output.

Retail sales

Source: National Bureau of Statistics.

Description: A monthly survey of sales by value; volumes are not reported. Sales are broken down by city, county, and smaller geographic units. While the series is titled "retail" sales, it includes both wholesale and retail sales. This is likely because of the difficulty in distinguishing between firms that sell directly to the public, to other firms, or a mixture of both, and there may be some double-counting as a result. Indeed, the amount of annual retail sales reported corresponded to 40% of 2002 GDP—implausibly large given that the much broader category of private consumption was only 45% of GDP. Separate figures for retail and wholesale sales are provided annually, but more than a year later. Moreover, the annual data are less inclusive as they exclude retail outlets selling less than Y5 million. Morgan estimates that about 30% of monthly reported sales are properly described as "retail" sales.

Nominal private consumption and retail sales



Where there are discrepancies between the reported level and annual change, the change is considered authoritative. To account for this inconsistency, JPMorgan produces an adjusted level: the previous 12 months are used as the base year, and the annual change is used to calculate a historical series.

Timing: Generally released in the second week of the following month.

Seasonal/focus: No seasonally adjusted data are released. Morgan calculates its own X-12 ARIMA seasonally adjusted series. Sales during the three week-long holidays in January, May, and October, are stronger than the months proceeding and following the holiday, while sales during the final quarter are seasonally stronger than the first three.

Revisions: Rare and small.

Comments: The market focuses on the annual changes. Both single month and year-to-date figures are reported. As the annual change is vulnerable to base effects, JPMorgan also uses seasonally adjusted figures to gauge momentum. The retail sales data are the only reliable high-frequency indicator of domestic demand: generally, periods of less than 7% sales growth are considered periods of weak consumer demand, and over 10%oya growth denotes strength. Sales data are also an important driver of budgetary policy, as the central government is trying to spur consumption.

Fixed investment

Source: National Bureau of Statistics

Description: Monthly, quarterly, and annual surveys of fixed investment outlays by enterprises. The monthly series was revised in January 2004 to more fully incorporate investment by the private and collective sectors. However, no historical series was provided. To correct for this the two series' growth rates must be spliced together, even though the levels are different. Although an imperfect approach, this is the only way to create a historical growth series. More positively, the new series provides a detailed breakdown of investment, including details on the manufacturing and tertiary sectors. The new monthly data is presented in level terms and the year-to-date annual change. Therefore, it will be impossible to calculate a monthly annual change before February 2005, when a full twelve months' of historical levels will have been released. The monthly, quarterly and annual figures rarely jibe; the annual series are more reliable.

JPMorgan Chase Bank, Hong Kong
Ben Simpfendorfer (852) 2800 7005
ben.simpfendorfer@jpmorgan.com

The monthly and quarterly series report annual changes as well as levels; annual series report levels only. Where discrepancies arise the changes are considered authoritative; JPMorgan calculates adjusted levels as for the retail sales data (see above).

Timing: Generally released in the second week of the following month. Details are usually available one day after the press release.

Seasonal/focus: No seasonally adjusted data are provided. Morgan calculates its own X-12 ARIMA seasonally-adjusted series. Owing to its emphasis on spending by the state sector, the monthly series reflects the seasonality of budgetary outlays. The latter are weighted towards the final half of the year, with 20% usually recorded in December, compared to just 37% in the first six months of the year. The markets focus on the annual change, while JPMorgan looks at both m/m and annual change figures.

Revisions: Rare and small

Comments: A focus for markets as a proxy for overall investment. However, the monthly data are volatile and should be treated with caution. Importantly, the government is trying to allocate its spending more evenly over the year, causing a structural shift towards the first half that inflates oya growth rates in H1 relative to H2. The values invested in the first half are still relatively small, however: for example, growth rates in January and February have risen smartly in recent years, but the value invested has still been less than 5% of annual spending.

Generally, both a level and growth rate are reported as year-to-date totals. Occasionally, though, single-month figures are reported without reference to the year to date.

Foreign direct investment

Source: Ministry of Foreign Trade and Economic Cooperation (MOFTEC).

Description: Monthly FDI data reported on both a utilized and contracted basis. "Utilized" FDI reports money spent; contracted data are for money pledged but not yet spent. The release generally includes the year-to-date annual change and the level, although monthly figures are occasionally released. The series reports gross inflows, not net.

Where discrepancies arise the changes are considered authoritative; JPMorgan calculates adjusted levels (see comment on industrial production data).

Timing: Generally released in the second week of the following month. A breakdown by investment vehicle, industry, and source and destination of investment, is available on a quarterly basis. However, these data are released sporadically and generally with a significant lag.

Seasonal/focus: Not seasonally adjusted. Flows in the first quarter are generally weaker than in the remaining three. The focus is the year-to-date annual change.

Revisions: Rare and small

Comments: The market generally focuses on year-to-date annual changes as the monthly changes are volatile and better interpreted on a moving average basis. The data are an important guide to future export growth, with inflows signalling rising capacity or a change in the product mix. Still, the figures are likely inflated because of round-tripping, or investment by residents through offshore companies. This trend is the result of the favorable tax breaks and investment incentives offered to foreign investors.

Merchandise trade

Source: General administration of customs, PRC

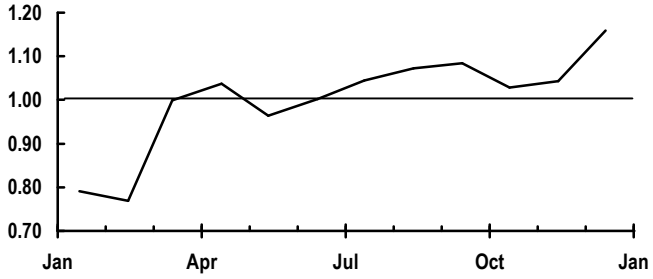
Description: A monthly report of the US dollar value of exports (f.o.b) and imports (c.i.f.) according to customs declarations, broken down by country and product. Imports are recorded by place of origin. And, while exports are classified by "final destination," they are more usually recorded by the first port of dispatch. This wrongly attributes Hong Kong as the destination for 20% of China's total exports; the actual figure is more likely 5%. There can be some distortion from varying carryover of items from the month of shipment to the following month because of late declarations. The product breakdown uses both the UN's SITC and the World Customs Organization's HS classifications.

Timing: Totals are generally released in the second week of the following month; breakdown by product and country in the third week of the following month.

Seasonal/focus: No seasonally adjusted data are released. Morgan calculates its own X-12 ARIMA seasonally adjusted series. Trade is seasonally strong from June

Merchandise exports' seasonal pattern

1 = no seasonal influence, 2001 to 2003 average



JPMorgan Chase Bank, Hong Kong
Ben Simpfendorfer (852) 2800 7005
ben.simpfendorfer@jpmorgan.com

through year end. Toys are earliest in the late-year order cycle, followed by clothing, and finally electronics. The focus is the annual change.

Revisions: Rare and small

Comments: Where there is a difference between the annual rate of change and the level, JPMorgan uses the change. Unlike with other data series, a difference between the rate of change and level in the preliminary release is corrected for in the final official release. Reference is made to seasonally adjusted data to determine the trend, but the adjusted data are unreliable during the Chinese New Year period.

Net exports are not a reliable input to real GDP forecasts; it is better to look at export growth alone, which has a strong correlation with industrial production (which, as noted, does move closely in line with real GDP).

Consumer price index

Source: National Bureau of Statistics.

Description: A monthly report of over-year-earlier change in consumer prices. Index levels are not reported, but Morgan derives its own using December 1998 as the base year. The overall change is a composite of the overall change in the rural and urban indices. The current basket's weights are for the year 2000, and are updated every five years. A breakdown is available, but the categories are loosely defined. Food is the largest component of the basket. There is no services component. However, services are incorporated into two categories: health care and personal articles; and recreational educational, and cultural articles. The housing component includes rent and utility costs. Morgan calculates a nonfood core index.

Timing: Generally released in the second week of the following month. Component details are usually available one day after the press release.

Seasonal/focus: No seasonally adjusted data are released.

CPI weighting
percent

	percent
Food	34.4
Residence	14.8
Recreational	14.3
Clothing	8.9
Medicine	8.8
Traffic	7.3
Household	6.5
Tobacco	5.0

Morgan calculates its own X-12 ARIMA seasonally adjusted series. The index tends to rise more in the first and fourth quarters when the climate is less favorable for fruit and vegetable crops. Annual change is the market focus.

Revisions: Rare and small.

Comments: The data receive considerable attention from officials and market commentators as a test of domestic demand trends. However, the index is heavily influenced by food prices, particularly in the winter months when crop output falls. As small landholders produce a large share of the country's crops, output is relatively vulnerable to bad weather conditions and poor distribution networks (note that produce sold at local markets are included in the index). While the central bank may discount this, the market is generally less aware. The impact of oil prices is more modest, since car ownership is low, and heating is required only in the northern regions.

The central bank does not target a specific price level or inflation rate; however, prices are an important consideration in achieving its mandate of stable economic growth.

Monetary aggregates

Source: People's Bank of China

Description: A monthly report of the level and annual change in money supply, and loans and savings deposits of financial institutions. The monetary aggregates are derived from the banking survey (which includes the balance sheets of the monetary authority, deposit money banks, and specific depository institutions).

Where discrepancies arise the changes are considered authoritative; JPMorgan calculates adjusted levels as for the retail sales data (see above).

Timing: Generally released in the second week of the following month. Breakdown is available on a monthly basis, generally three months after the reported month.

Seasonal/focus: Seasonally adjusted data available one day after press release. Annual change is the focus for markets.

Revisions: Rare and small

Comments: The monetary aggregates are followed as an indicator of official policy. Traditionally, the central bank assigned credits quotas to regulate money growth. More recently, however, market instruments have gained in importance, although the central bank can still exert moral suasion through its 'guidance window'.

JPMorgan Chase Bank, Hong Kong
Ben Simpfendorfer (852) 2800 7005
ben.simpfendorfer@jpmorgan.com

Hong Kong

The monthly data cycle

Same month	Following month	Second following month
	Middle third	**First third**
	Labor force survey	Retail sales
	Last third	
	International trade	
	Visitor arrivals	
	Consolidated account	
	Consumer price index	

The quarterly data cycle

	Following month	Second following month
		Gross domestic product

JPMorgan Chase Bank, Hong Kong
Ben Simpfendorfer (852) 2800 7005
ben.simpfendorfer@jpmorgan.com

Gross domestic product

Source: Census and Statistics Department.

Description: GDP is compiled by both expenditure and supply, on a quarterly and annual basis. The expenditure data are considered more reliable, as the supply data have a relatively short history. The series adopts SNA 1993 standards. Nominal and real data (2000=100) are released, along with the fixed-weight deflators.

Timing: Quarterly expenditure-based GDP is released two months after the end of the reference quarter, in the final week of that month. The exception to this rule is the fourth quarter report, which is released in the first week of March. Annual expenditure-based GDP is also released in the first week of March. Quarterly and annual supply-based GDP are released three and eleven months, respectively, after the reference period.

Seasonal/focus: Seasonally adjusted data are provided for quarter-on-quarter changes, but not levels. Seasonally adjusted data are provided for all components, with the exception of fixed investment. JPMorgan calculates its own X-12 ARIMA seasonally adjusted fixed investment series. Market focus is on the annual change.

Revisions: Major revisions occur every few years to bring reporting in line with international standards. The last major revision was in 2002. Minor revisions occur more frequently. All revisions are released with subsequent GDP reports.

Comments: While the market focuses on annual changes, this is often a poor indicator of recent trends. JPMorgan focus on the seasonally adjusted change compared to the previous quarter, which is a better indication of momentum. The GDP is the most closely watched indicator on Hong Kong's domestic economic conditions, in the absence of reliable monthly data. Private consumption data are most important; those on investment tend to be more erratic. Note that private consumption includes residents' consumption abroad (with a counterpart subtraction for net imports of "travel"), and excludes consumption by nonresidents in Hong Kong (counted as exports). Traditionally, GDP consumption exceeded local spending on consumer goods and services, but recently the adjustment has become negative (that is, net exports in this category have become positive) because of a sharp rise in nonresidents' spending. In addition, the 03Q3 report included downward revisions to historical spending by nonresidents. The change resulted from the realignment of the survey method with latest international standards. The result was that quarterly nonresidents' spending was reduced an average 25%. This raised GDP consumption, but lowered service exports, with the result that there was no net impact on GDP. Finally, the merchandise trade data in GDP closely match the monthly trade volume series (see below), but there is no reliable gauge to service trade, other than tourist arrivals.

Composition of GDP
percent share of real value, 2002

Supply basis		Expenditure basis	
Manufacturing	4.5	Private Consumption	56.4
Utilities	3.1	Govt Consumption	9.9
Construction	4.6	Fixed Investment	25.8
Trade and tourism	25.8	Change In Stocks	0.2
Foreign trade	20.0	Exports	153.5
Restaurants and Hotels	2.5	Goods	124.8
Transport and communication	10.1	Re-exports	113.9
Finance and real estate	22.1	Services	28.6
Financing and Insurance	11.5	Transportation	8.2
Real Estate	6.1	Travel	6.1
Business Services	4.4	Imports	145.7
Social and Personal Services	20.0	Goods	130.9
Others	9.8	Services	14.8

Labor force survey

Source: Census and Statistics Department.

Description: A monthly survey of households covering the three-month period ending with the reporting month. The sample covers 1% of all households and includes persons over 15 years of age. A person is classified as unemployed if he or she has not had a job in the seven days prior to the survey, but has been available and looking for work during that time. A person is classified as underemployed if he or she has worked less than 35 hours per week in the seven days prior to the survey and was either available or sought additional work during that time.

Timing: Generally released in the third week of the following month. A breakdown by occupation is available in the second following month.

Seasonal/focus: Unemployment and underemployment rates are seasonally adjusted by the Department of Census and Statistics using X-11 ARIMA. All other data are not seasonally adjusted. Morgan calculates its own X-12 ARIMA seasonally adjusted series. Market focus is on the unemployment rate, which is perceived as a major influence on consumer sentiment.

Revisions: Rare and small.

Comments: The unemployment rate has risen in recent years because of a structural mismatch in supply and demand. Although the market pays attention to this rate, the number of persons employed is a better indicator of cyclical labor trends.

JPMorgan Chase Bank, Hong Kong
Ben Simpfendorfer (852) 2800 7005
ben.simpfendorfer@jpmorgan.com

Retail sales

Source: Census and Statistics Department.

Description: A monthly report of retail sales based on a survey of 3,000 stores, in a sample that is rotated over a three-month cycle. Indices by value and volume are released (Oct 1999-Sep 2000=100), as well as an annual change. Goods are classified by outlet, rather than commodity, warranting care in interpreting the breakdown that is provided. Total annual receipts account for around 14% of GDP

Timing: Generally reported in the first week, two months after the reported month.

Seasonal/focus: A seasonally adjusted three-month moving change is announced in the press release. The seasonally adjusted level is available the following day. Market focus is on the annual change.

Revisions: Rare and small.

Comments: The sales data are volatile, and a poor indicator of the trend in private consumption. As durable goods and jewelry account for nearly 30% of total sales, the data tend to exaggerate swings in consumption, especially during a downturn. Separately, tourist spending is estimated to account for 18% of total sales value, further distorting the series' usefulness as an indicator of residents' consumption.

Merchandise trade report

Source: Census and Statistics Department.

Description: A monthly report of the HK dollar value of exports (f.o.b) and imports (c.i.f.) according to customs declarations. Exports are broken down into "domestic" exports and re-exports. A "domestic export" is defined as a natural product of Hong Kong, or the product of a manufacturing process in Hong Kong that has permanently changed the shape or nature of a material. Imports are credited to the country from which they were last dispatched, which is not necessarily the country of manufacture. Exports are credited to the country of first unloading, which is not necessarily the final destination. Separately, there can be distortions from variable carryover from the month of shipment to the following month because of late declarations. Extensive breakdowns are available, including, by country, product, and source and destination of re-exports. A volume index is also available (2000=100). Both a level and annual change are released.

Timing: Reported generally in the fourth week of the following month. A breakdown by country and product is released one week after the main report, and a breakdown by volume is released three weeks after the main report.

Seasonal/focus: No seasonally adjusted figures are provided. Morgan calculates its own X-12 ARIMA seasonally adjusted series. Market focus is the annual change.

Revisions: Rare and small.

Comments: While the market usually focuses on comparisons with year-earlier levels, these are often volatile. Hong Kong's development as a logistics center for China, in particular the growth of its air-freight sector, contributes to the volatility. For this reason, a single month's reading is usually a poor indicator of trend. JPMorgan prefers its own seasonally adjusted series for gauging the trend, although even these adjusted data are unreliable during the Chinese New Year period. The trade report is important as net exports are a key swing factor in GDP.

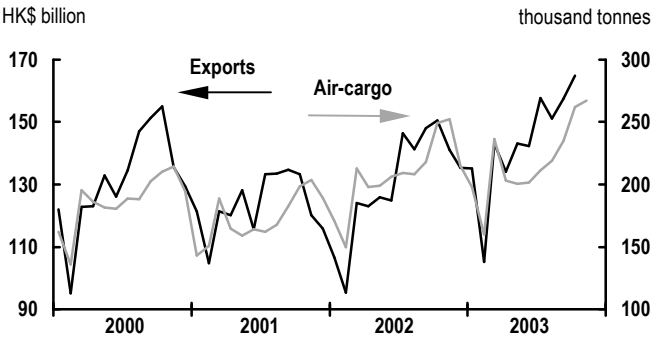
Visitor arrivals

Source: Census and Statistics Department

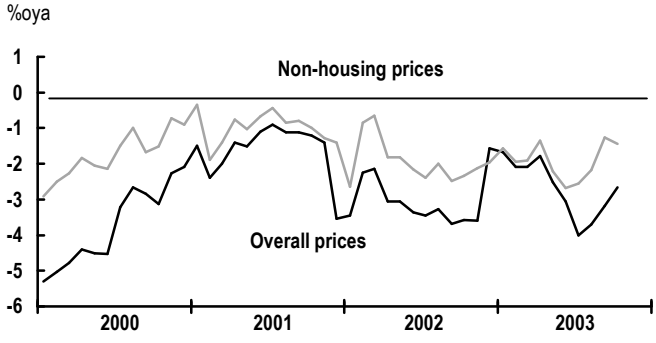
Description: A monthly report of visitor arrivals, including those through Macau, by country of residence.

Timing: Generally reported in the third week of the following month.

Merchandise exports and air-cargo



Composite consumer price index



JPMorgan Chase Bank, Hong Kong
Ben Simpfendorfer (852) 2800 7005
ben.simpfendorfer@jpmorgan.com

Seasonal/focus: No seasonally adjusted data are provided. Visitor arrivals usually surge in February, May, and October when mainland China enjoys week-long holidays. Market focus is the annual change.

Revisions: Rare and small.

Comments: Tourist arrivals are the best indicator of tourist-sector activity, an increasingly important contributor to GDP growth. Along with the monthly trade data, tourist arrivals are a guide to forecasting quarterly service exports. The data have been subject to question recently, since they include as "visitors" an increasing number of transit passengers who leave the same day as arriving. Specifically, this mainly relates to Taiwanese passengers travelling on to mainland China. Thus, critics argue that the data inflates the actual number of "tourists" visiting Hong Kong.

Consumer price index

Source: Census and Statistics Department.

Description: A monthly measure of consumer prices based on household expenditure patterns surveyed in 1999-2000. Both a level and annual change are reported. Data are collected mainly through field visits to some 4,000 retail outlets and service providers. Aside from the composite index, three subindices are presented, based on the expenditure patterns of households in low, medium, and high expenditure ranges. The low expenditure index covers 50% of households, while the high range covers 10% of households. The food weighting is larger among low expenditure households, while the service weighting is larger among high expenditure households. The composite CPI is calculated separately to the three subindices. In addition, JPMorgan calculates a nonhousing and nonfood CPI.

Timing: Generally reported in the third week of the following month.

Seasonal/focus: A change in the seasonally adjusted three-month moving average is announced in the press release. The seasonally adjusted level is available the following day. Morgan calculates its own X-12 ARIMA seasonally adjusted series. Market focus is the annual change.

Revisions: Rare and small.

Comments: The headline change, while followed in the market, tends to be volatile. JPMorgan uses its own seasonally adjusted data to determine the trend. Housing costs, mainly private rental costs, are the major influence on the index, accounting for 30% of the total basket. Given the small size of Hong Kong, temporary public concessions on items included in the basket, such as property rates and utility charges, can have a large distorting effect on the index. Movements in the trade-weighted value of the HK$ have limited effect on the overall index owing to an effective peg against the USD, and implied peg against the RMB.

Government consolidated account

Source: Financial Services Bureau

Description: A monthly report of government revenue, expenditure, and balance. The consolidated account includes equity investment in the government's Capital Investment Fund. The financial year runs from April to March of the following year.

Timing: Reported generally on the last day of the following month.

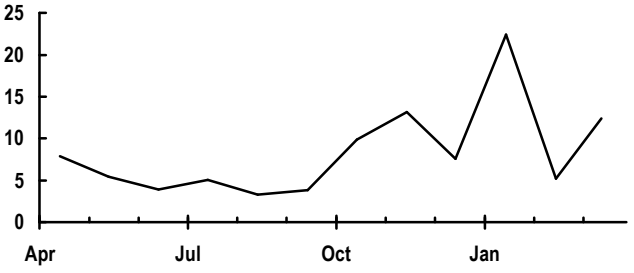
Seasonal/focus: There are no seasonally adjusted data. Market focus is the headline fiscal balance.

Revisions: Rare and small.

Comments: The recent widening in the budget deficit has raised market attention to this report. However, the data are often poorly understood as revenues tend to be clumped towards the end of the year, with expenditures more evenly distributed. Thus, the accumulated midyear balance is often greater (less) than the final deficit (surplus).

Hong Kong: annual distribution of government revenues

percent share collected



JPMorgan Chase Bank, Singapore
Chia-Liang Lian (65) 6882 2253
chia-liang.lian@jpmorgan.com

Taiwan

The monthly data cycle

Same month	Following month	Second following month
	First week	
	External trade	Retail sales
	Consumer price index	
	Foreign exchange reserves	
	Third week	
	Industrial production	
	Export orders	
	Labor market	
	Money supply	
	Fourth week	
	Composite of leading indicators	

The quarterly data cycle

	Following month	Second following month
		Gross domestic product
		Current account

JPMorgan Chase Bank, Singapore
Chia-Liang Lian (65) 6882 2253
chia-liang.lian@jpmorgan.com

Gross domestic product

Source: Directorate General of Budget, Accounting and Statistics (DGBAS)

Description: Quarterly national accounts are compiled from both expenditure-based and production data. GDP is measured in current NT$ terms, as well as in inflation-adjusted NT$ with the base year 1996.

Composition of GDP:

% of nominal GDP, 2003	
Total GDP	100.00
Manufacturing	25.54
Financial services	21.01
Retail	19.85
Government services	10.81
Community/social wk	10.57
Transportation	6.85
Business services	2.82
Others	2.55

Timing: Released in February, May, August, and November, for the previous quarter.

Seasonals/focus: Not seasonally adjusted. Focus is on over-year-earlier growth rates.

Revisions: Typically for data in the previous two quarters.

Comments: The contribution of manufacturing has progressively declined from a peak of 36% of GDP in 1987 to slightly above one-quarter in recent years. While this is a common structural pattern among industrial economies, it has been exacerbated by the progressive migration of factories to lower-cost locations like mainland China. Still, fears of deindustrialization in Taiwan are overdone. Compared with other regional countries, Taiwan is better positioned to deal with the evolving challenges of manufacturing, given its flexible economic structure.

Industrial production

Source: Ministry of Economic Affairs (MOEA)

Description: Monthly indices (1996=100) of overall industrial production volume along with a sectoral breakdown.

Composition of IP index:

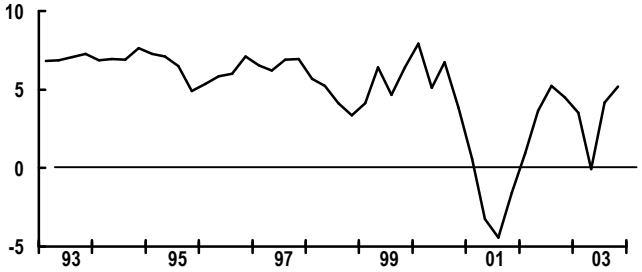
% weighting	
Industrial production	100.00
Mining	0.26
Manufacturing	87.99
Electric, electronic machinery	23.29
Chemical products	8.13
Basic metal products	8.09
Fabricated metal products	5.38
Transport equipment	5.21
Gen. machinery and equipment	5.00
Other manufacturing	32.89
Electricity, gas, and water	7.57

Timing: Released around the 23rd day of the following month. Both seasonally adjusted and unadjusted series are provided. Focus is on over-year-ago growth.

Revisions: Minor.

Real GDP

percent change over previous year



Comments: The index is mainly sensitive to the growth of manufacturing sectors, almost 90% of the total. The high-frequency series provides good guidance in forecasting GDP performance.

Composite index of leading indicators

Source: Council for Economic Planning and Development.

Description: A monthly composite index (1996=100) of economic variables designed to characterize the business environment and confidence. The seven components are: manufacturing new orders, exports, wholesale prices, equity prices, permitted construction space, M1B, and average monthly hours worked in manufacturing.

Timing: Released toward the end of the following month.

Seasonals/focus: Except for equity prices, all components are adjusted for seasonal variations. Focus is on change in the level compared to the previous month.

Revisions: Nearly every month, for previous month's data.

Comments: Notwithstanding the late timing of its release, the leading index provides a good directional signal to overall economic performance, three to six months forward.

Labor market

Source: DGBAS

Description: A monthly report on unemployment based on a survey of households. Men and women are deemed to be unemployed if they are over 15 years of age, in the labor force and: have no job, are available to work, and are seek-

JPMorgan Chase Bank, Singapore
Chia-Liang Lian (65) 6882 2253
chia-liang.lian@jpmorgan.com

ing a job or awaiting the outcome of a job application. A job is defined as 15 hours of work during the survey week.

Timing: Released around the 23rd day of the following month. The reference week is the one including the 15th day of the month.

Seasonals/focus: Seasonally adjusted series are available from April 1993. Focus is increasingly shifting toward the seasonally adjusted jobless rate

Revisions: Minor revisions are made each month.

Comments: The unemployment rate has historically been quite low and stable (usually between 1.2% and 2.0%). The rise in educational levels and structural changes in many industries have caused a labor shortage that has been addressed by importing cheap labor from abroad. In recent years, a a combination of structural and cyclical factors has pushed the average jobless rate above 5%, though more recently, it has trended down to around 4.5%.

Retail sales

Source: Ministry of Economic Affairs (MOEA)

Description: A monthly report of aggregate NT$ value of turnover in the retail sector, based on a survey of retail companies.

Timing: Released around the last week of the second following month.

Composition of retail sales:

% of total, 2003	
Retail sales	100.0
Department stores	6.3
Supermarkets	3.0
Convenience store and outlets	14.6
Motor vehicles	16.4
Fuel products	6.8
Household appliances, supplies	14.4
Education and entertainment gds.	3.9
Household electrical goods	0.9
Clothes	6.4
Others	17.1

Seasonals/focus: Not seasonally adjusted. Focus is on over-year-ago change.

Revisions: Every month and minor.

Comments: Retail sales show a strong correlation to stock-market performance, reflecting the high rate of equity ownership among domestic individuals.

Export orders

Source: Ministry of Economic Affairs

Description: A monthly report of the NT$ value of orders for Taiwan-made goods received from overseas, based on a survey of Taiwanese companies. Breakdown is provided by product and country.

Timing: Released around the 23th of the following month, alongside the industrial production report.

Seasonals/focus: Not seasonally adjusted. Focus is on over-year-ago changes.

Comments: Provides guidance for tracking export performance three months forward.

International trade

Source: Department of Statistics, Ministry of Finance

Description: A monthly report of the value of imports (c.i.f.) and exports (f.o.b.), in both NT$ and US$ terms. Totals are broken down by country and commodity.

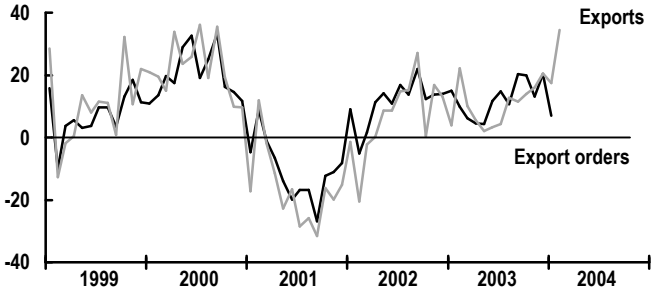
Timing: Released around the 7th of the following month.

Seasonals/focus: Not seasonally adjusted. Focus is on over-year-ago changes, with the interest mainly in exports.

Revisions: Minor changes are usually made to the previous couple of months' data.

Exports and export orders

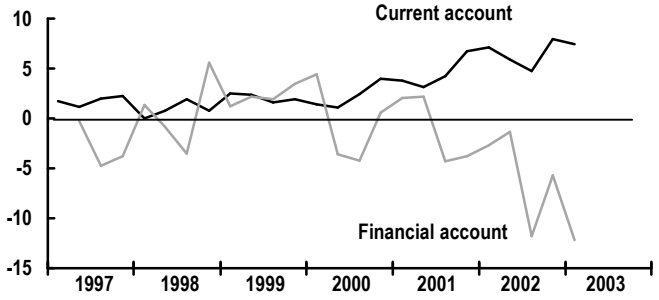
percent change over previous year



JPMorgan Chase Bank, Singapore
Chia-Liang Lian (65) 6882 2253
chia-liang.lian@jpmorgan.com

Balance of payments

US$billion



Comments: While intraregional trade—especially with Hong Kong and mainland China—has increased, trends in demand from the major industrial markets continue to be the key factor tracked by analysts as a guide to current export performance.

Balance of payments

Source: Central Bank of China

Description: A quarterly report on international trade and capital flows, in US dollars. On the current account, imports and exports are reported on an f.o.b. basis, and each includes non-merchandise trade as well as merchandise. The financial balance includes direct, portfolio, and other investments. Other investments include transactions by the government and banking sectors.

Timing: Released two month after the end of the reference quarter.

Seasonals/focus: Not seasonally adjusted. The focus is typically centered on the details of the financial balance.

Revisions: Can be significant.

Comments: Important, in the sense that the current account details present the most comprehensive details and trends of trade performance. However, interest in this report is diminished because much of the information becomes available before it is released.

Consumer price index

Source: Directorate-General of Budget, Accounting and Statistics (DGBAS) and Central Bank of China (CBC)

Description: A monthly index (1996=100) of consumer prices calculated on the basis of the household expenditure pattern in the 1996 consumer expenditure survey.

Composition of the CPI:

% weighting	
Consumer prices	100.00
Food	27.36
Clothing	5.85
Housing	31.37
Transport and communication	11.08
Medicines, medical care	3.85
Education and entertainment	13.62
Miscellaneous	6.87

Timing: Released around the 5th of the following month.

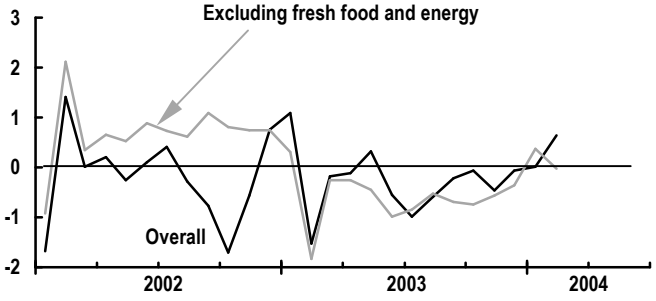
Seasonals/focus: A seasonally adjusted series for overall CPI is available from January 1991 on. However, focus is increasingly on the over-year-earlier percentage change of the core CPI series, which strips out perishable food and energy prices.

Revisions: Minor.

Comments: The CPI index is particularly sensitive to changes in housing and food prices, which are heavily weighted in the overall index.

Consumer price indices

percent change over previous year



JPMorgan Chase Bank, Singapore
Chia-Liang Lian (65) 6882 2253
chia-liang.lian@jpmorgan.com

Money supply

Source: Central Bank of China

Description: A monthly report of monetary aggregates including: M1A (currency held by the public + checking accounts and passbook deposits of enterprises and individuals at monetary institutions), M1B (M1A + passbook savings deposits of individuals at monetary institutions), and M2 (M1B + quasi-money).

Timing: Released on the 25th of the following month.

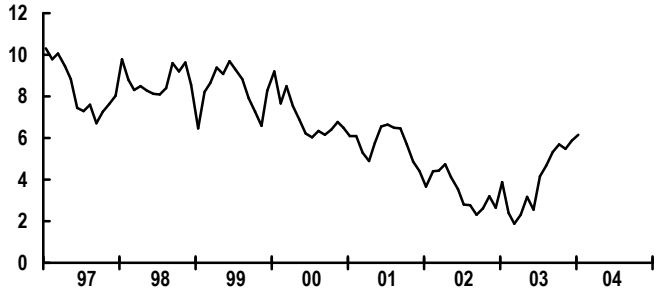
Seasonals/focus: Not seasonally adjusted. Focus is on over-year-ago changes.

Revisions: Minor revisions are made every month.

Comments: Monetary growth rates are sensitive to stock market performance and interest rates.

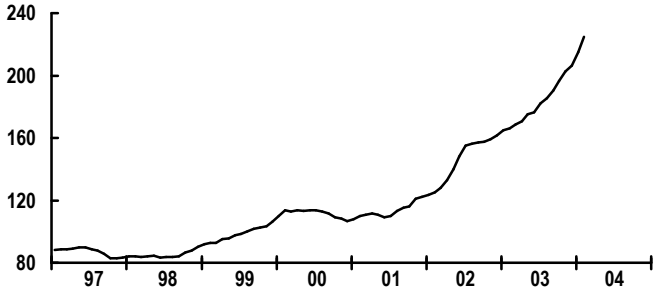
Money supply, M2

%oya, eop



Foreign exchange reserves

US$billion



Foreign exchange reserves

Source: Central Bank of China

Description: A monthly report of the central bank's holdings of internationally acceptable means of payments that are available to finance balance of payments imbalances, in US$ terms.

Timing: Released during the first week of each month for the final day of the month prior.

Seasonals/focus: Not seasonally adjusted. Focus is on the trend in monthly changes.

Comments: The rapid growth of official foreign exchange reserves continues to offer vivid evidence of Taiwan's strong balance of payments.

JPMorgan Chase Bank, Seoul
Jiwon Lim (822) 758-5509
jiwon.c.lim@jpmorgan.com

South Korea

The monthly data cycle

Same month	Following month	Second following month
Final week	**First week**	
Consumer price index	Preliminary customs trade	Service activity
	FKI business confidence	E-commerce sales
	BoK business confidence	Foreign liabilities and assets
	Producer price index	Monthly wages
	Foreign exchange reserves	
	Second week	
	NSO consumer survey	
	Employment report	
	Monetary aggregates	
	Third week	
	Bankruptcy profiles	
	Department store sales	
	Fourth week	
	Balance of payment	
	Final estimate of customs trade	
	Industrial production	
	Producers shipment and inventory	
	Composite indicators	
	Wholesale and retail trade	
	Machinery orders	
	Construction orders	
	Balance of payment	

The quarterly data cycle

Final month of the quarter	Following month	Second following month
Consumer survey		Gross domestic product

JPMorgan Chase Bank, Seoul
Jiwon Lim (822) 758-5509
jiwon.c.lim@jpmorgan.com

Gross domestic product

Source: Bank of Korea

Description: Quarterly output-based real GDP (in 2000 won) is broken down by producing sector. An expenditure-based breakdown is also included, but these data are derived from the output-based series. A separate report provides gross national income figures and the deflators.

GDP by sector in 2002

% of real total

Total GDP	100.0
Services	49.2
Manufacturing & mining	26.2
Construction	7.2
Energy	2.4
Others	15.0

Timing: Released two months after end of reference quarter.

Seasonal/focus: Both seasonally adjusted and unadjusted data are provided. Currently, the Bank relies on X12 ARIMA, but adding the method to capture Korea specific holiday/business day effect.

GDP by end use in 2002

% of real total

Total GDP	100.0
Private consumption	55.0
Government consumption	12.1
Fixed investment	29.8
Machinery & equipment	16.8
Intangible assets	1.7
Construction	11.3
Exports	40.5
Imports	37.4

Revisions: Not regular, and not finalized until the following year's GDP report.

Comments: While the Bank of Korea has started releasing seasonally adjusted figures, official and market focus is still more on over-year-ago growth. Gross National Income often diverges from GDP, mainly owing to terms of trade effects.

Industrial production/capacity utilization

Source: National Statistics Office

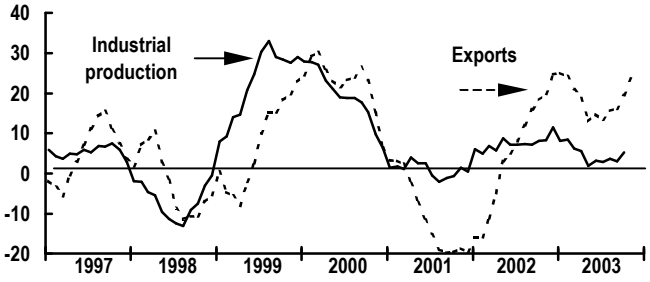
Description: Monthly indices (2000=100) of industrial production with sectoral breakdown. The IP report tracks manufacturing, mining, and energy activity, but the latter two represent only 0.3% and 3.9% of the index, respectively. The report also contains detailed indices for production, producers' shipments, and inventory for each major manufacturing sector and type of product.

Timing: Released at the end of the following month.

Seasonal/focus: Both seasonally adjusted and unadjusted data are provided for all series, except that capacity utilization is not seasonally adjusted.

Industrial production and exports

%oya, 3mma



Revisions: Rebased every five years. Some revisions in the interim, but not on a regular basis.

Comments: Industrial production is a good advance indicator of GDP growth. It is highly correlated with the export cycle. Producers' inventories are a more reliable indicator of companies' inventory situation than the overall inventories that appear in the National Accounts. After a sharp reduction during the 1997-98 crisis, producers' inventories have risen along with shipments; however the inventory/shipment ratio remains low compared to pre-crisis levels.

Composite indicators

Source: National Statistics Office

Description: A monthly index (2000=100) comprising weighted averages of selected indicators. Composite leading indicators average nine economic indicators: the ratio of workers placed to displaced, inventory ratio, business sentiment, business equipment, capital goods imports, building permits, KOSPI index of equity prices, broad monetary aggregate, and terms of trade. Coincident indicators average seven indicators: new hires in the nonfarm sector, industrial production, capacity utilization in manufacturing, wholesale and retail trade, construction, imports, and exports. Lagging composite indicators are averages of six indicators.

Timing: End of the month following the reference month.

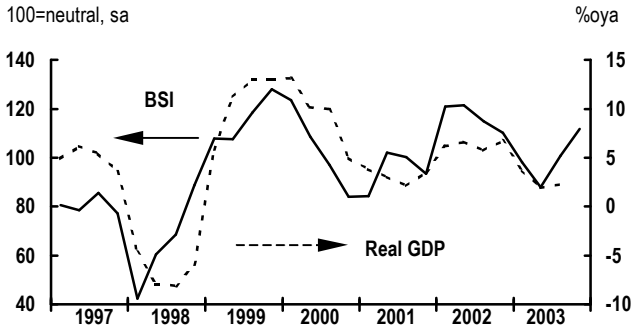
Seasonal/focus: Seasonally adjusted.

Revisions: Small revisions when new data are added.

Comments: Before the late 1990s crisis, over-year-ago changes tracked the business cycle well, but recently the month-on-month change has become a more reliable way to monitor the business cycle.

JPMorgan Chase Bank, Seoul
Jiwon Lim (822) 758-5509
jiwon.c.lim@jpmorgan.com

FKI's BSI for overall business condition outlook and real GDP



FKI business confidence

Source: Federation of Korean Industry

Description: Monthly sentiment indices (neutral level = 100) based on a survey of the top 600 companies (by sales). No composite index is provided, but the index of the outlook for overall business conditions one month ahead is most frequently quoted. Questions cover: overall business conditions, sales at home and abroad, investment, employment, profitability, and inventories. All items are subdivided into current conditions and 1-month ahead expectations.

Timing: Released in the first week of the following month

Seasonal/focus: Both seasonally adjusted and unadjusted data are provided.

Revisions: Seasonally adjusted series are updated whenever new data points are added

Comments: Owing to its long history (since 1970) and frequency, FKI's business survey is more widely used than the Bank of Korea's business survey. By definition, actual activity should relate to whether the index is above 100 or not (a reading above the neutral level is consistent with an increase in activity). But used this way, the survey helps forecast only very near-term activity. A better leading indicator comes from looking at changes in the index level, not at whether the index is above 100 or not. Actual activity peaks and bottoms lag these changes by about 3-6 months.

BoK business confidence

Source: Bank of Korea

Description: Monthly indices (neutral=100) from a survey of 1789 manufacturing and 1113 service-producing companies. No composite index is provided, but the index of the outlook for overall business conditions one month ahead is most frequently quoted. Compared to the FKI survey, it has a larger sample, and results are also subdivided into those for small, mid-sized, and large companies. The survey was quarterly through 2002; it converted to monthly starting January 2003.

Timing: Released in the first week of the following month

Seasonal/focus: Not seasonally adjusted

Revisions: None

Comments: The survey includes relatively small and mid-sized companies, giving the same weight to all companies.

Employment report

Source: National Statistics Office

Description: A monthly survey of joblessness, defined in line with ILO standards, but shy of more inclusive OECD standards. The National Statistics Office performs a fixed-sample interview survey of about 30,000 representative households for one week each month, deeming those who work more than one hour during the survey period to be employed.

Timing: Released in the middle of the following month.

Seasonal/focus: Both seasonally adjusted and unadjusted data are provided.

Revisions: Every month, and not finalized until the full year's data are published.

Comments: Korea's unemployment rate has historically been stable, thanks in part to the relatively high share of employment engaged in agriculture. Also, in economic recessions, women (40% of employees) often cease to look for work, thereby muting the rise that would otherwise occur in the official unemployment rate.

Monthly wages

Source: Ministry of Labor

Description: Monthly survey of nominal wages at companies that employ more than 5 persons (since 2002; before that the survey covered only companies with more than 10 persons). Data are broken down by industries.

Timing: Normally in the middle of second following month, but sometimes delayed.

Seasonal/focus: Data are not seasonally adjusted.

Revisions: Occasional; usually not extensive.

Comments: Because of seasonal distortions from bonus pay-

JPMorgan Chase Bank, Seoul
Jiwon Lim (822) 758-5509
jiwon.c.lim@jpmorgan.com

ments, whose timing is based on the traditional lunar calendar, focus is mainly on over-year-ago growth of accumulated year-to-date average salaries.

Wholesale and retail trade

Source: National Statistics Office

Description: A monthly survey of sales at 5000 companies. Data are presented both in current prices and on a constant-price basis, deflated using producer price index for wholesale trade and consumer price index for retail trade.

Timing: Released at the end of the following month.

Seasonal/focus: Both seasonally adjusted and unadjusted data are provided.

Revisions: Every month; not finalized until the full year's data are complete.

Comments: Wholesale and retail trade is a representative monthly proxy of private consumption. It includes auto and auto-fuel consumption.

E-commerce sales

Source: National Statistics Office

Description: A monthly report of nominal sales based on a survey of 3242 companies that sell through B2C cyber-shopping malls on the internet. Breakdown by product and payment method is provided.

Timing: Released in the middle of second following month

Seasonal/focus: Not seasonally adjusted

Revisions: Some

Comments: The survey started in 2001, and covers about 5% of wholesale and retail trade. The NSO began including the data in wholesale and retail trade in August 2003.

Department and discount store sales

Source: Ministry of Commerce, Industry and Energy

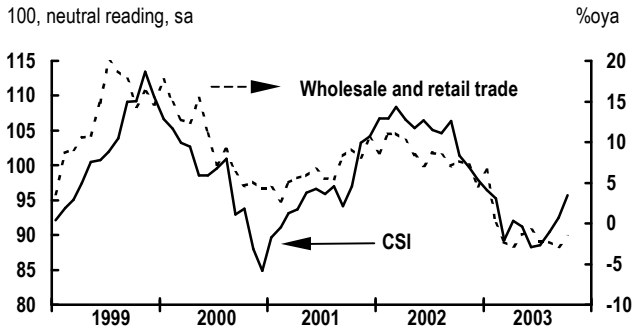
Description: A monthly report of *nominal* sales based on a survey of department and chain-store sales

Timing: Released in the middle of following month

Seasonal/focus: Not seasonally adjusted

Revisions: Some

CSI (NSO) for 6-month ahead outlook, and wholesale &retail trade



Comments: A good advance gauge of wholesale and retail trade, but more volatile. Focus is on over-year-ago growth.

NSO consumer survey

Source: National Statistics Office

Description: A monthly report on sentiment based on a survey of 2000 households. Two composite headline indices (netural=100) are provided, one for current conditions and the other for expectations six months ahead. The headline for current conditions is the average of general economic conditions and consumers' own living conditions. The expectations index comprises of five outlook items for: general economic conditions, consumers' own living conditions, spending plans, spending plans for durable goods, and expenditures on leisure.

Timing: Released in the middle of the following month.

Seasonal/focus: Not seasonally adjusted.

Revisions: None

Comments: Consumers' own living condition and spending plan indices are most closely related to actual consumption activity. However, they tend to be coincident, helping to forecast only very near-term activity.

BoK consumer survey

Source: Bank of Korea

Description: Quarterly indices (neutral=100) based on a survey of 2500 households. No composite indices are provided. Questions cover: general economic conditions (current and six-months ahead), consumers' own living conditions (current and outlook), spending plans, job market outlook, inflation outlook, and interest rate outlook. The data are presented by income and age group.

JPMorgan Chase Bank, Seoul
Jiwon Lim (822) 758-5509
jiwon.c.lim@jpmorgan.com

Timing: Released in the final month of the quarter

Seasonal/focus: Not seasonally adjusted

Revisions: None

Comments: The outlook indices for general economic conditions and consumers' own living conditions are most frequently quoted.

Business equipment investment estimate

Source: National Statistics Office

Description: A monthly index (2000=100) of actual capital spending, covering about 63 sectors of the national input-output table which is revised every five years. The index is calculated using commodity flow method.

Timing: Released at the end of the following month

Seasonal/focus: Not seasonally adjusted

Revisions: Every month; not finalized until the full year data are complete.

Comments: A representative proxy of business investment in the National Accounts.

Machinery orders

Source: National Statistics Office

Description: A monthly report of the aggregate value of machinery orders received by 123 surveyed firms, quoted in billions of won.

Timing: Released at the end of the following month

Seasonal/focus: Not seasonally adjusted

Revisions: Every month; not finalized until the full-year data are complete.

Comments: Machinery orders excluding vessels are a leading indicator of monthly business equipment investment. Orders are broken down into those from foreign and domestic companies. Orders are reported both including and excluding vessels (Korea has a large shipbuilding industry, which can distort overall orders trends). The lag between orders and investment can vary depending on business sentiment and funding conditions.

Construction orders

Source: National Statistics Office

Description: A monthly report of the aggregate value orders received by surveyed construction firms, in billions of won.

Timing: Released at the end of the following month

Seasonal/focus: Not seasonally adjusted

Revisions: Every month; not finalized until the full-year data are complete.

Comments: Orders are broken down into those from private and public entities, and by construction categories. The series is a good leading indicator of construction investment in the National Accounts.

Customs trade

Source: The Office of Customs Administration

Description: A monthly report of the US dollar value of imports (c.i.f.) and exports (f.o.b.) based on customs clearances.

Timing: Totals are released on the 1st or 2nd of each month for the previous month. Full product and country breakdowns are released at the end of the reference month.

Seasonal/focus: Not seasonally adjusted

Revisions: At the end of the month; not finalized until the full-year data are complete.

Comments: Issuance of import licenses and letters of credit, as well as over-year-ago customs trade growth for the first 20 days of the month, are leading indicators of monthly customs trade. The first estimate, released on the first day of the following month, contains only total exports and imports, however the first 20 days' over-year-ago changes by product and source or destination are available with the initial release.

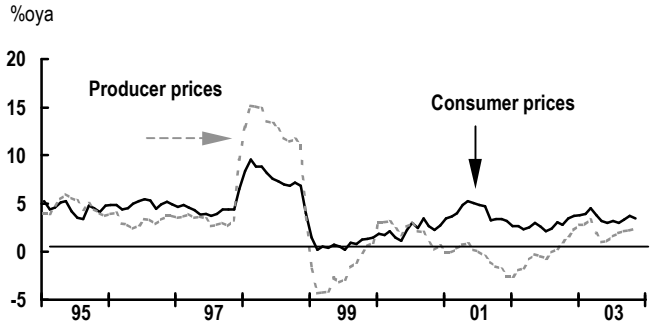
Balance of payments

Source: The Bank of Korea

Description: A monthly report of international current and capital flows according to IMF definitions, reported in US$. The current account is broken down into merchandise trade, services trade, and net transfers Capital flows identify portfolio investment by asset type and FDI.

JPMorgan Chase Bank, Seoul
Jiwon Lim (822) 758-5509
jiwon.c.lim@jpmorgan.com

Consumer and producer prices



Timing: Released on the 29th or 30th of each month for the previous month.

Seasonal/focus: Not seasonally adjusted

Revisions: Every month; not finalized until the full-year data are complete.

Comments: Before the late 1990s crisis, changes in the current account balance were led by investment-driven capital goods imports. But in recent years, they are also affected by the service account, notably travel. The capital account is driven more by portfolio investment than direct investments.

Consumer prices

Source: National Statistics Office

Description: A monthly index (2000=100) of prices at the consumer level for a fixed basket of goods and services. A core price index is provided, which excludes food and energy prices.

Timing: Released at the end of each month

Seasonal/focus: Not seasonally adjusted

Revisions: Revisions are irregular; the series is rebased every five years.

Comments: Often distorted by weather effects on food prices. The Bank of Korea targets core CPI inflation.

Producer prices

Source: The Bank of Korea

Description: A monthly index (1995=100) of factory and wholesale trade prices for domestically produced goods (846 items) and services (77 items). The index includes both final and input prices.

Timing: Released early in the following month

Seasonal/focus: Not seasonally adjusted

Revisions: Rebased every five years

Comments: A good leading indicator of CPI, but more volatile due to a higher proportion of food prices.

Stage of processing price index

Source: The Bank of Korea

Description: A monthly index (2000=100) of prices reported by Korean manufacturers, divided into crude, intermediate, and finished goods components. Each of these indices includes prices of imported goods (unlike the PPI).

Timing: Released early in the following month

Seasonal/focus: Not seasonally adjusted

Revisions: Rebased every five years

Comments: A good leading indicator of the CPI; more useful than the PPI for gauging domestic pass-through of global price changes.

Monetary aggregates

Source: The Bank of Korea

Description: A monthly report of money supply on several definitions:

M1 = currency in circulation + demand deposits
M2 = M1 + time and saving deposits + marketable instruments (CD, RP, cover bills, etc) of deposit money banks.
M3 = M2 + deposits from other financial institutions + debentures issued + commercial bills sold + CDs + RPs + cover bills.

JPMorgan Chase Bank, Seoul
Jiwon Lim (822) 758-5509
jiwon.c.lim@jpmorgan.com

Timing: Released early in the following month, except for M3 figures which are available with a two-month lag.

Seasonal/focus: Not seasonally adjusted for M1 and M2. Focus is on over-year-earlier percentage changes.

Revisions: Minor.

Comments: Since financial market deregulation and the 1997-98 crisis, the importance of M3 has increased.

Official foreign reserves

Source: The Bank of Korea

Description: Foreign reserves including gold, valued in US dollars.

Timing: Released on a biweekly basis on the 16th and 1st of the following month.

Seasonal/focus: Not seasonally adjusted

Revisions: Almost none

Comments: Watched as an indicator of official fx intervention, which in turn helps track pressures on the currency and the future direction of monetary policy.

Bankruptcy report

Source: Bank of Korea

Description: A monthly report on the number and value of dishonored bills and bankruptcies, broken down by region and sector. The main items are a ratio of dishonored bills to total bills outstanding (based on number of cases, rather than value) and the number of newly declared bankruptcies. The same release also reports the number of newly registered companies in Korea's eight largest cities.

Timing: Middle of the following month

Seasonal/focus: Not seasonally adjusted

Revisions: None

Comments: Bankruptcy filings lag the dishonored bill ratio by one month, but still lead the unemployment rate.

Central government budget

Source: Ministry of Finance

Description: A monthly report of the consolidated financial balance of the central government, *reported on a cumulative year-to-date basis*. Figures excluding social security funds, which are in large surplus, are also reported.

Timing: Irregular, but often in the middle of the second following month

Seasonal/focus: Not seasonally adjusted.

Revisions: Some

Comments: The consolidated budget figures started being reported after the late 1990s crisis, and data quality has been improving ever since. The fiscal balance turned into surplus in 2000, and has generally risen since then.

Foreign liabilities and assets

Source: Ministry of Finance

Description: A monthly report of aggregate external liabilities and assets, subdivided into those of the government, banks, and private companies.

Timing: Irregular, but often in the middle of the second following month

Seasonal/focus: Not seasonally adjusted

Revisions: Some

Comments: Short-term liabilities often take key focus.

JPMorgan Chase Bank, Singapore
Rajeev Malik (65) 6882-2375
rajeev.malik@jpmorgan.com

Indonesia

The monthly data cycle

Same month	Following month	Second following month
	Consumer price index	
	International trade	
	Producer price index	
	Federal government budget	

The quarterly data cycle

	Following month	Third following month
		Gross domestic product
		Balance of payments

The weekly data cycle

Foreign exchange reserves

JPMorgan Chase Bank, Singapore
Rajeev Malik (65) 6882-2375
rajeev.malik@jpmorgan.com

Gross domestic product

Source: Badan Pusat Statistik (BPS), statistics Indonesia.

Description: Quarterly GDP figures are provided at current and constant 1993 market prices in Indonesian rupiah. Deflators (1993=100) are provided with the report. GDP is computed by both production and expenditure approaches, and compiled in accordance with the IMF's System of National Accounts 1968. BPS is converting the current national accounts to the SNA 1993 and expects to complete this work in 2004, after the completion of the national input-output table for 2000.

GDP composition in 2002

% of nominal total

Total expenditure	100.0
Private consumption	70.7
Govt. consumption	8.2
Gross fixed capital formation	20.2
Exports	35.4
Imports	28.6
Total production	100.0
Agriculture	17.5
Mining and quarrying	11.9
Manufacturing	25.0
Electricity, gas, and water	1.8
Construction	5.7
Wholesale, retail, and restaurant trade	16.1
Transport, storage, communic.	6.1
Financial services	6.6

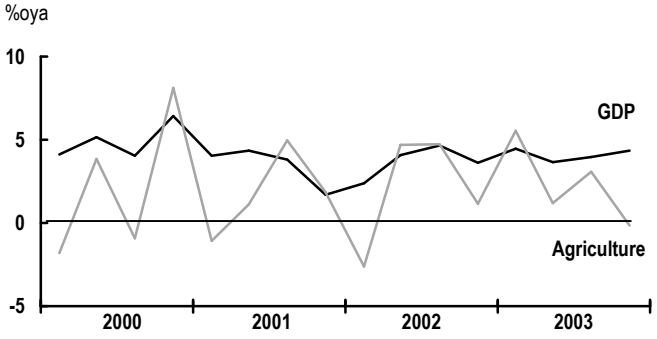
Timing: Released approximately three months after the end of the reference quarter.

Seasonals/focus: Not seasonally adjusted. Focus tends to be on changes in real GDP over a year earlier and on quarter-on-quarter changes. Swings in agriculture can be sizeable and distort the headline figure.

Revisions: Revisions are typically made every quarter; they can be sizable, especially for some of the expenditure components, and can affect several quarters.

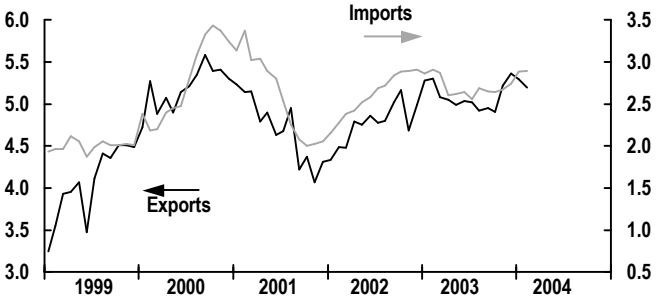
Comments: Production GDP data are more reliable than expenditure estimates. GDP data are important as the only comprehensive data available to track the direction and magnitude of economic activity.

Real GDP and agriculture



Exports and imports

US$ billion per month, sa, both scales



International trade

Source: Department of Statistics

Description: Monthly exports (f.o.b.) and imports (c.i.f) in US dollars based on customs clearances. Total exports include the gross value of exports processed in export zones. Since January 1998, total imports include those of the State Oil Company (Pertamina) and foreign oil companies operating in Indonesia, as well as goods imported into export zones for further processing. Imports through the Batam export zone are calculated as being 90 percent of the value of the exports from this export zone, based on the results of a survey undertaken in 1996.

Timing: Total exports and imports are released 1 to 3 days after the end of the reference month (normally, the same day as the CPI release). Country and product breakdowns become available a few days later.

Seasonals/focus: Not seasonally adjusted. Focus tends to be on over-year-ago percentage change in exports and imports. Cumulative year-to-date percentage changes over the same period a year earlier are also followed. Exports and imports tend to follow a similar trend, which results in a trade balance that tends to hover around US$1.8-2.2 billion.

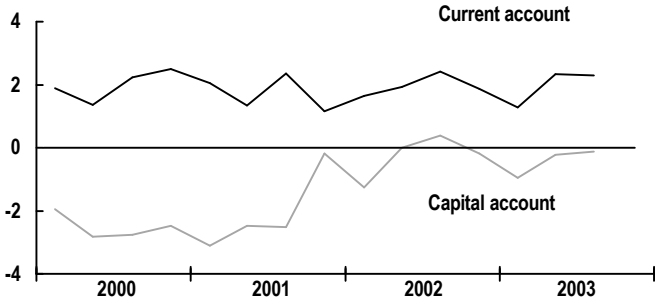
Revisions: The data are provisional when first released and subject to ongoing revision until they are made final no later than 24 months after the end of the reference month.

Comments: Provides a useful indicator of the manufacturing sector.

JPMorgan Chase Bank, Singapore
Rajeev Malik (65) 6882-2375
rajeev.malik@jpmorgan.com

Current and capital account

US$ billion per quarter, nsa



Balance of payments

Source: Bank Indonesia (BI)

Description: Quarterly international current and capital flows in US dollars, compiled largely in accordance with the concepts in the fourth edition of the IMF's Balance of Payments Manual. BI is likely to move to the methodology in the fifth edition of the manual in the near future.

Timing: Approximately three months after the end of the quarter, but sometimes delayed by several more quarters.

Seasonals/focus: Not seasonally adjusted. The focus is on the balances (trade, services, income) as a share of GDP. Capital account transactions are particularly important, although data are not very reliable.

Revisions: Revisions are common.

Comments: An important indicator to track in light of continuing pressure to meet external payments obligations. Specifically, the current account has generally been stable, hovering around US$1.5-2.0 billion per quarter. By contrast, the capital account tends to be more volatile, ranging from deficit of US$2.5 billion to a marginal surplus of US$0.4. This is usually the driver of the BoP outcome and its components should d be carefully watched. However, its lagged release tends to limit its usefulness.

Producer price index (PPI)

Source: Badan Pusat Statistik (BPS), Statistics Indonesia.

Description: A monthly Laspeyres index (1993=100) covering the agricultural, mining and quarrying, industry, import, and export sectors. A total of 11,000 prices are collected each month from 4,350 wholesalers in 124 provincial or regency capital cities. There are 327 items or commodities included. The weights used in the index are based on marketed surplus, including taxes, in the 1993 base year. The index is rebased and the weights are revised at least every 10 years. The index was rebased to the present 1993 base year in July 1999.

Timing: Released about a month after the end of the reference month.

Seasonals/focus: Not seasonally adjusted. The focus is on month-on-month and over-year-ago changes.

Revisions: The data are final when first released.

Comments: A useful indicator but not well covered by financial media.

Consumer price index

Source: Badan Pusat Statistik (BPS), statistics Indonesia.

Description: A monthly index (1996=100) based on the Laspeyres formula, measuring the average rate of change in prices of a fixed basket of goods and services and covering 43 major urban areas. The index covers between 249 and 353 goods and services classified into seven major groups: food; prepared food, drinks, cigarettes, and tobacco; housing; clothing; education; health; and transport and communication. The weights used in the index are based on the 1996 Cost of Living Survey. The index is re-based and the weights revised approximately every 10 years.

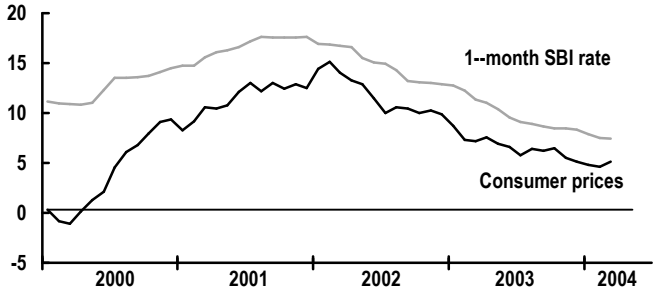
Timing: Released 1 to 3 working days after the end of the reference month.

Seasonals/focus: Not seasonally adjusted. The focus is on month-on-month and over-year-ago changes.

Revisions: The data are final when first released.

Conumer prices and policy rate

Inflation: %oya; policy rate: %p.a.



JPMorgan Chase Bank, Singapore
Rajeev Malik (65) 6882-2375
rajeev.malik@jpmorgan.com

Comments: The central bank tends to base tits policy rate, the 1-month SBI rate, on the relative movements in the headline inflation rate. The volatility in the headline inflation rate comes mainly from the food component, which is influenced by a combination of domestic agricultural output and global agricultural prices.

Federal government budget

Source: Ministry of Finance.

Description: A monthly report of revenue, expenditure, budget balance, and financing of the central government. Financing is broken down into foreign-currency and domestic-currency borrowing. The data are on a cash basis, and are derived from the (unaudited) accounting records of actual outturns.

Timing: Released approximately one month after the end of the reference month.

Seasonals/focus: Not seasonally adjusted. The main focus is on over-year-ago percentage changes in revenue and expenditure, the size of the budget deficit, and the financing of that deficit.

Revisions: The data are provisional when first released. Final data for the fiscal year (see below) that are based on 12 months of actual data are published 15 months after the end of the fiscal year in the Audited Budget Report.

Comments: Up to 1999/2000, the fiscal year ran from April 1 through March 31. The fiscal year 2000 was a transition period, covering from April 1, 2000 to December 31, 2000. Starting from 2001, the fiscal year runs from January 1 to December 31.

Analytical accounts of the central bank

Source: Bank Indonesia (BI)

Description: Data are disseminated in billions of Indonesian Rupiah, based on the accounting records of Bank Indonesia, and show the assets and liabilities of Bank Indonesia. Data are disseminated on: reserve money (monetary liabilities), claims on central government, claims on deposit money banks, claims on the rest of the domestic economy, gross foreign assets and gross foreign liabilities, liabilities to the central government.

Timing: The central bank's accounts are reported weekly, usually for the 7th, 15th, 23rd and final day of the month. The release is no later than five working days after the reference date.

Seasonals/focus: Not seasonally adjusted. Statistical noise tends to rise during the period around the Hari-Raya holidays, usually characterized by a rapid rise in reserve money.

Revisions: No revisions.

Comments: There are several important indicators released. Reserve money, together with the 1-month SBI rate, provides a reliable indication of the central bank's monetary policy stance. Also, the determinants of reserve money, in terms if net foreign assets (NFA) or net domestic assets (NDA) provides some insight into the underlying operations of the central bank. Also useful is the gross and net foreign reserves data. The gross FX reserves data provides an indication of the balance of payments position while the net FX reserves data indicates the usable reserves available to the central bank.

Analytical accounts of the banking sector

Source: Bank Indonesia (BI)

Description: Data are disseminated in billions of Indonesian rupiah on the analytical accounts of the banking sector which cover the operations of the central bank and the commercial banks. The components disseminated are: M1 and M2; net claims on central government; claims on official entities and state-owned enterprises (covering credit to provincial governments, claims on regional governments, claims on public enterprises, claims on public financial institutions, and other claims on government); claims on the private sector (covering all claims on private businesses and individuals); and the net foreign position. The data are presented on a consolidated basis.

Timing: Monthly, within 4 weeks after the end of the reference month.

Seasonals/focus: Not seasonally adjusted.

Revisions: Minor revisions.

Comments: The data provide insight into underlying domestic demand conditions. The credit data, for consumption credit and investment in particular, give a useful indication of strength in these two demand components.

JPMorgan Chase Bank, Singapore
Rajeev Malik (65) 6882-2375
rajeev.malik@jpmorgan.com

Malaysia

The monthly data cycle

Same month	Following month	Second following month
	Producer price index	Industrial production
Consumer price index	International trade	Federal government budget

The quarterly data cycle

	Second following month	Third following month
	Gross domestic product	Balance of payments

The weekly data cycle

JPMorgan Chase Bank, Singapore
Rajeev Malik (65) 6882-2375
rajeev.malik@jpmorgan.com

Gross domestic product

Source: Department of Statistics.

Description: A quarterly report of nationwide economic activity, provided in both current and constant (1987) Malaysian ringgit terms. The components of GDP are reported on both production and expenditure basis, and in real and nominal terms. The data are compiled in accordance with the methodology set out in the SNA 1968.

GDP composition in 2003

% of nominal total	
Total expenditure	**100.0**
Private consumption	43.3
Private fixed investment	7.8
Government purchases	28.1
Consumption	13.8
Investment	14.3
Exports	114.9
Imports	93.9
Total production	**100.0**
Agriculture	9.5
Mining and quarrying	10.4
Manufacturing	31.2
Electricity, gas	3.2
Construction	3.8
Wholesale, retail and restaurant trade	13.4
Transport, storage, comm.	6.7
Financial services	11.3

Timing: Announced approximately 7 to 8 weeks after the end of the reference quarter.

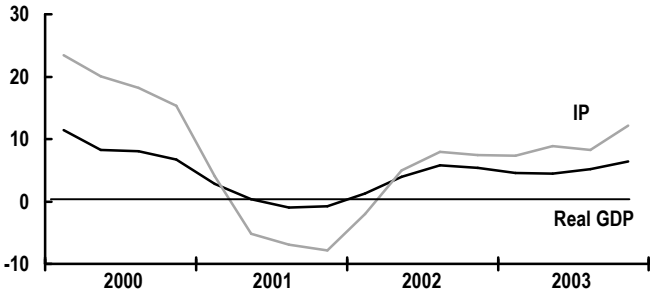
Seasonals/focus: Not seasonally adjusted. Focus tends to be on changes in real GDP compared to a year earlier. The quarterly series exhibits seasonal fluctuations, especially around the lunar new year holidays, which affect the quarter ending March.

Revisions: Revisions are typically made to the quarterly data for the most recent year. Revisions can be sizable at times, especially for some of the components.

Comments: The details of the GDP report are important and sometimes market-moving, given the lack of high-frequency data for consumer spending and service sector performance. The quarterly GDP series starts in 1991. Export/GDP and import/GDP ratios are very high (see table) owing to large reexport trade with Singapore.

Real GDP and industrial production index

percent change over previous year



Industrial production

Source: Department of Statistics.

Description: A monthly index (1993=100) computed as a weighted average of three major sectors: mining, manufacturing, and electricity. Sectoral weights are in proportion to each sector's contribution to total GDP in the 1993 base year. At the major group and industry level, the weights are based on the group or industry's proportion of the total census of value added in the 1993 base year.

Composition of the IP index:

% weighting	
Total	100.0
Manufacturing	70.4
Mining	22.2
Electricity	7.4
Export-oriented industries	73.2
Electronic, electrical pdts	33.0
Chemicals, chemical pdts	15.5
Textiles and apparel	5.6
Wood and wood products	7.6
Rubber products	4.6
Domestic-oriented industries	26.8
Nonmetallic mineral products	5.0
Fabricated metal products	4.5
Food products	4.0
Basic metals	4.0

Timing: Overall output and totals for domestic and export-oriented production are released around the 8th of the following month, that is with a lag of 5-6 weeks. Detailed breakdown is released a week after this preliminary report.

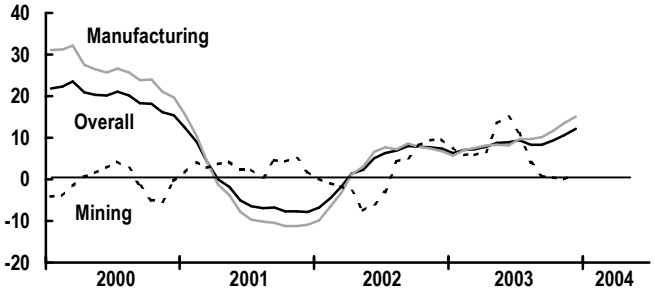
Seasonals/focus: Not seasonally adjusted. Focus tends to be on month-on-month and over-year-ago changes. Additionally, cumulative year-to-date percentage changes over the same period a year earlier are favored as the year progresses.

Revisions: Revisions can sometimes be substantial for the most recent month or two.

Comments: By far the most reliable indicator for measuring economic activity on a monthly basis, although sizable revisions can complicate the task of using these data to track

Industrial production index

%oya, 3mma



JPMorgan Chase Bank, Singapore
Rajeev Malik (65) 6882-2375
rajeev.malik@jpmorgan.com

overall economic activity. Correlation with GDP is diminishing because non-trade related services (for which there are few reliable monthly indicators) have gained importance in recent years. In recent years the index has been re-based every 4 to 5 years. (However, the electricity subindex was revised in 2003, without any changes to manufacturing or mining subindices.)

International trade

Source: Department of Statistics

Description: Monthly value of merchandise imports (c.i.f) and exports (f.o.b), reported in current ringgit based on customs clearances.

Timing: Total exports and imports are released around the first of the second month following the reference month. A more detailed breakdown of exports and imports becomes available about a week after the preliminary release.

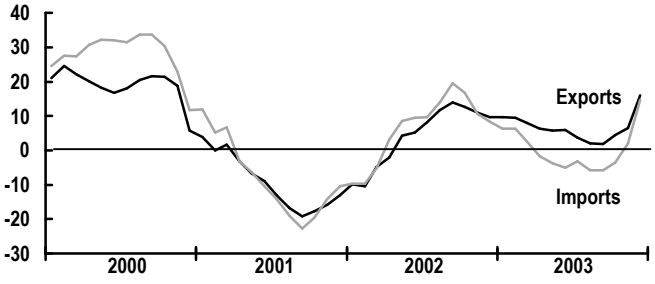
Seasonals/focus: Not seasonally adjusted. Focus tends to be on changes in exports and imports over one year earlier. Cumulative year-to-date percentage changes over the same period one year ago are favored as the year progresses.

Revisions: Can be significant for the previous two months.

Comments: Tracking international trade data gives reliable indications about industrial sector and competitiveness of exports. Exports and imports trends are highly correlated as electronics exports (51% of total exports) have a high import content. Also, the export performance has significant impact on economic growth, as exports are nearly 100% of GDP.

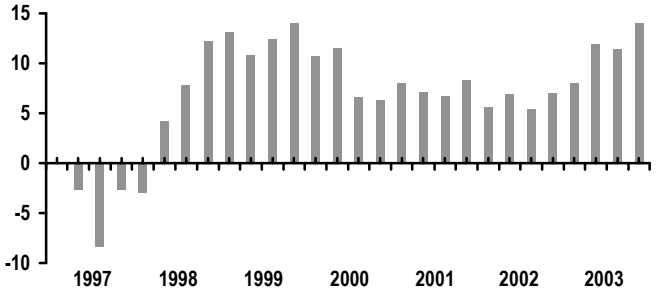
Merchandise trade

%oya, 3mma



Current account balance

Ringgit billion, nsa



Balance of payments

Source: Bank Negara Malaysia

Description: A quarterly report of international current and capital flows in ringgit terms. Starting from 1999 Q1, data follow the methodology set forth in the 5th edition of the Balance of Payments Manual of the IMF. They are presented under two broad components: the current account, and the capital and financial account.

Timing: Approximately three months after the end of the reference quarter.

Seasonals/focus: Not seasonally adjusted

Revisions: Minor revisions are common.

Comments: Malaysia has been running sizable current account surpluses since the Asian financial crisis in 1997-98, owing to huge surpluses on the trade account.

Producer price index (PPI)

Source: Department of Statistics.

Description: A monthly index of producer prices (1989=100), based on a Laspeyres formula and covering about 1,400 commodities in agriculture, mining, manufacturing, and utility (water, gas, and electricity) production. The data are collected from a monthly survey covering total production of all the sectors. Prices include sales taxes, import taxes, and other duties. The weights are derived from the input-output tables of the Final National Accounts, and

JPMorgan Chase Bank, Singapore
Rajeev Malik (65) 6882-2375
rajeev.malik@jpmorgan.com

are normally revised every 5 years in tandem with the finalization of the National Accounts input-output tables.

Timing: Released a month after the reference month.

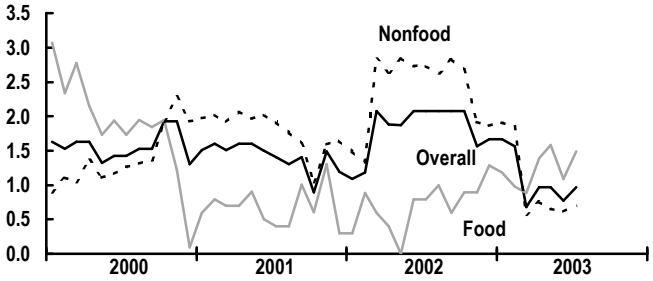
Seasonals/focus: Not seasonally adjusted. The focus is on month-on-month and over-year-ago changes.

Composition of the PPI:

% weighting	
Total	100.0
Food	33.8
Beverages and Tobacco	3.1
Clothing and Footwear	3.4
Gross Rent, Fuel and Power	22.4
Furniture, Furnishing	5.3
Medical Care and Health	1.8
Transport & communication	18.8
Entertainment, Education	5.9
Miscellaneous G&S	5.5

Consumer price indices

percent change over previous year



Revisions: Data are provisional when released and are finalized a month later. Revisions are usually minor.

Comments: The PPI covers both local production (79.3%) and imports (20.7%). No ministerial commentary accompanies the release, and the data is not reported widely in the press.

Consumer price index

Source: Department of Statistics.

Description: A monthly index (2000=100) based on a Laspeyres formula, measuring the average rate of change in prices of a fixed basket of goods and services in both rural and urban areas. The weights are derived from the household expenditure survey, normally revised every 5 years.

Composition of the CPI:

% weighting	
Total	100.0
Food	33.8
Beverages and tobacco	3.1
Clothing and footwear	3.4
Gross rent, fuel and power	22.4
Furniture, furnishings	5.3
Medical care and health	1.8
Transport , communications	18.8
Entertainment, education	5.9
Miscellaneous goods and services	5.5

Timing: Released in the second or third week of the following month.

Seasonals/focus: Not seasonally adjusted. The focus is on month-on-month and over-year-ago percentage changes.

Revisions: No revisions.

Comments: The CPI is the most widely used indicator of price pressure in the economy, and is watched closely by the government and the central bank. Utility prices are set administratively, and unscheduled revisions normally cause a one-off jump in the CPI.

Federal government budget

Source: Data collated by the Ministry of Finance but released in Bank Negara's monthly statistical bulletin.

Description: A monthly report of revenue and expenditure of the federal government, reported on a cash basis. The fiscal year is the same as the calendar year.

Timing: Data released with approximately 1-month lag.

Seasonals/focus: Not seasonally adjusted. The last quarter of the year generally posts the widest quarterly deficit.

Revisions: The data are generally considered to be final when first released. Revisions, if any, are reflected in the annual data published in the "Annual Accounts of the Federal Government" in October of each year. However, preliminary annual estimates are contained in the Economic Report that is released in conjunction with the budget in late September or early October.

Comments: The federal government has recorded deficits for six straight years as of 2003. The government is emphasizing fiscal consolidation, but the goal of balancing the budget by 2006 announced last year appears ambitious.

Foreign reserves

Source: Bank Negara Malaysia

Description: A semimonthly report of the central bank's holdings of gross foreign assets, including SDRs and gold, and of liabilities. With effect from January 1, 1999, the foreign assets and liabilities are revalued on a quarterly basis.

JPMorgan Chase Bank, Singapore
Rajeev Malik (65) 6882-2375
rajeev.malik@jpmorgan.com

Timing: Reported around the beginning and end of each month. The latest release shows the stock of foreign reserves as of a week earlier.

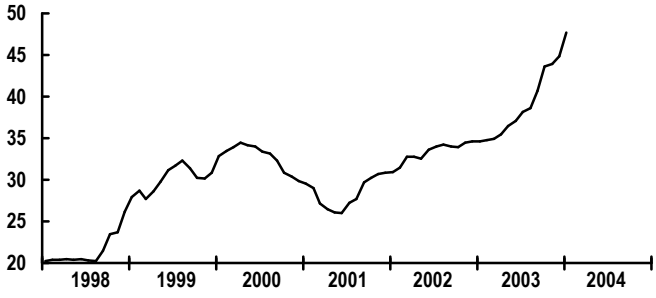
Seasonals/focus: Not seasonally adjusted.

Revisions: No revisions.

Comments: An important indicator affecting the sustainability of the ringgit's peg to the US dollar. Recent reserve acquisitions have afforded Bank Negara flexibility to continue its independent monetary policy, despite the currency peg. Official commentary accompanying the data release has improved after the Asian financial crisis, and now offers some color on the reasons behind the changes in foreign reserves.

Foreign exchange reserves

US$billion, eop



JPMorgan Chase Bank, Singapore
Sin Beng Ong (65) 6882-7143
sinbeng.ong@jpmorgan.com

Philippines

The monthly data cycle

Same month	Following month	Second following month
	Consumer price index	Exports
	Car sales	Imports
	International reserves	
	National Government budget	

The quarterly data cycle

	Following month	Second following month
		Agricultural output
		Gross domestic product
		Labor force report

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Sin Beng Ong (65) 6882-7143
sinbeng.ong@jpmorgan.com

Gross domestic product

Source: National Statistical Coordination Board (NSCB) assumes estimation in 1990.

Description: Quarterly figures are compiled on both expenditure-based and output-based GDP, following the UN System of National Accounts. While some elements of the 1993 SNA are incorporated, the compilation still largely follows the 1968 SNA. (For example, GNP is still a focus instead of GNI; and imports are valued at c.i.f.) Both nominal and real magnitudes are reported, the latter based on fixed-weight deflators with the base year 1985. Quarterly GDP data begins with 1981; annual regional GDP accounts are also available, starting 1971.

GDP composition in 2002

% of nominal total	
Private consumption	69
Private fixed investment	17
Government purchases	13
Exports	49
Imports	48
Agriculture	15
Industry	32
Services	53
Nominal GDP (US$, bn)	77

Timing: Nationwide Q1 to Q3 data are available with a two-month lag; Q4 (and full-year) data come out one month after year end. The exact schedule of release dates is published by NSCB every January. Regional GDP accounts are released with a seven-month lag.

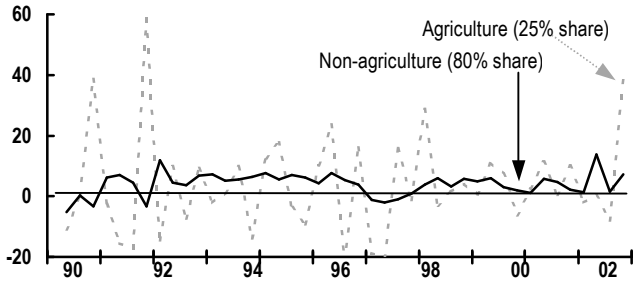
Seasonal/focus: Seasonally adjusted quarterly data were first made available in 1993; their history goes back to 1988. Official deseasonalized series are limited to headline GDP, the production components and personal consumption expenditure.

Revisions: Typically small and usually only affecting the previous quarter.

Comments: Because agricultural output is subject to wide swings driven by weather and other exogenous factors, cyclical and longer-term development of the economy is best gauged using real GDP ex agriculture.

Real GDP: Agriculture small and volitile while non-ag growth steady

%q/q, saar



Industrial production/capacity utilization

Source: National Statistics Office (NSO).

Description: The monthly "value of production" index, or VoPI (1994=100) is based on the monthly "integrated survey of selected industries" (MISSI). The index is presented in real terms, deflated by the Producer Price Index (see below). Capacity utilization data are collected at the firm level directly from the MISSI.

Timing: Preliminary monthly data are only available after a lengthy 55-day lag, which means that data for the final month of the quarter are released just before that quarter's GDP data.

Seasonal/focus: Monthly data are not seasonally adjusted. Market focus is on changes over a year earlier, although monthly sa changes are useful in assessing quarterly trends in the manufacturing component of GDP.

Revisions: Tend to be very small.

Comments: Of only limited usefulness because of long lag.

Agricultural output

Source: Department of Agriculture.

Description: A quarterly report on the "performance of Philippine agriculture" provides a detailed breakdown of crop, livestock and poultry, and fishery output, in both value and volume terms.

Timing: Six weeks after the reference quarter.

Seasonal/focus: Data are not seasonally adjusted, but levels and over-year-ago changes are useful for fine-tuning quarterly GDP estimates

Revisions: Small.

Comments: Because droughts and floods often drive crop output, the agriculture report gives early guidance on that important component of GDP.

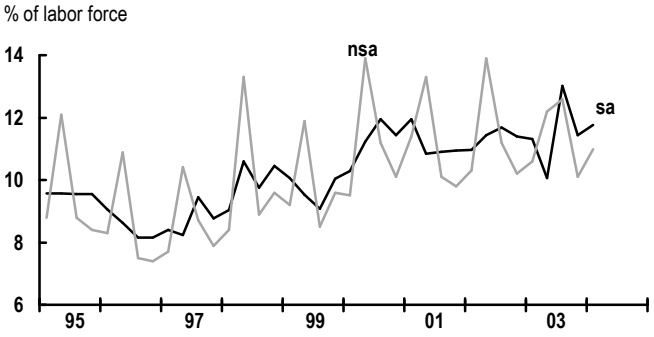
Labor force report

Source: National Statistics Office (NSO).

Description: A quarterly (January, April, July, October) report on employment, unemployment, and underemployment for the country as a whole, by province, and for key cities. The Labor Force Survey was redesigned in 1996 based on the 1995 Census of Population and covers 41,000 households. Data are collected via personal interviews to determine respondents' employment status. The labor force survey includes all those who, during the reference period, are

JPMorgan Chase Bank, Singapore
Sin Beng Ong (65) 6882-7143
sinbeng.ong@jpmorgan.com

Unemployment rate



15 years old and over as of their last birthday, have no job/ business, and are actively looking for work. Also considered as unemployed are persons without a job or business who are reported not looking for work because of their belief that no work is available or because of temporary illness or disability, bad weather, pending job application, or awaited job interview.

Timing: Release about six weeks after the reference month.

Seasonal/focus: Not seasonally adjusted

Revisions: None.

Comments: The series provides a useful gauge for sector-level hiring.

Vehicle sales

Source: Car association (CAMPI)

Description: Monthly sales data are collected from car dealers. Figures are disaggregated into passenger cars and commercial vehicles. There is also a split between CAMPI and nonCAMPI sales, but the latter are very small.

Timing: Within two weeks after the reference month.

Seasonal/focus: Not seasonally adjusted. Focus is on over-year-ago changes but seasonally adjusted data are also analyzed for month-on-month changes.

Revisions: None.

Comments: Given the paucity of high-frequency consumer spending indicators and the importance of consumption in GDP, car sales data get significant attention. Because so-called Asian Utility Vehicles have become wildly popular among Philippine households and the AUVs are classified as commercial vehicles, it is best to focus on the aggregate of total vehicle sales. Seasonally adjusted quarterly changes in vehicle sales are volatile, but give a reasonable signal about the sign and magnitude of the change in the consumption component of GDP.

International trade

Source: National Statistics Office (NSO).

Description: Monthly data on exports and imports in US dollar terms. The data are the original amounts compiled from Customs import entries and export declarations. For Balance of Payment (BoP) purposes, import data generated by the NSO are adjusted by the Bangko Sentral ng Pilipinas (BSP, the agency that compiles the BoP) to exclude the value of aircraft procured under operational lease arrangements. However, the value of aircraft acquired under financial lease arrangements is included in the import data.

Timing: Export data are released about five weeks after the reference month; imports come out about two weeks later.

Seasonal/focus: Not seasonally adjusted. Market focus tends to be on over-year-ago changes, but monthly changes also receive some attention.

Revisions: Significant upward revisions were made to import data in 2003. The revisions were the result of a multi-year effort to correct underreporting of imports, particularly electronics imports, at the country's export processing zones. Because of the tax-free status of such imports, the Customs Department traditionally had little incentive to track these data closely. In the end, the historical import data were revised higher by US$3 to US$3.5 billion per year, or about 10% of the total, starting in 1999.

Comments: Electronics exports now make up over 60% of the total, so these are typically analyzed separately. Given the high import content of Philippine exports, analysts often look to imports of intermediate electronic products as a leading indicator of electronics exports. But given the poor historical tracking of imports generally, this correlation has not proven very useful.

Balance of payments

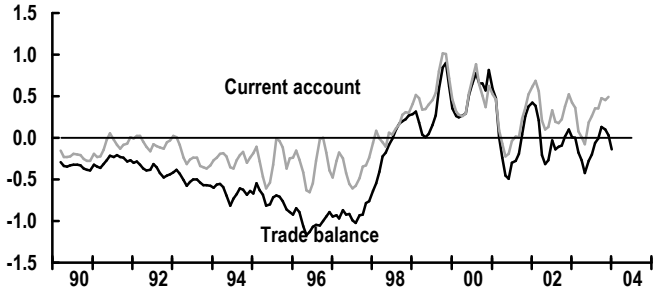
Source: Bangko Sentral ng Pilipinas (BSP).

Description: Data are disseminated in millions of US dollars on the standard categories: the current account, which consists of exports and imports of goods and services, income receipts and income payments and net current transfers; the capital account, which consists of net capital transfers and net nonproduced nonfinancial assets; the financial account (excluding reserves), which consists of net portfolio investment, net direct investment, and other investment; and transactions in reserve assets and liabilities (changes in net reserve assets). The overall balance of payments position is financed by transactions in reserves, adjusted for revaluation of reserve assets and reserve-related liabilities as well

JPMorgan Chase Bank, Singapore
Sin Beng Ong (65) 6882-7143
sinbeng.ong@jpmorgan.com

Trade balance and current account

US$ billion, 3mma, nsa



as monetization of gold. Reserve-related liabilities consist of short-term liabilities of the BSP and the use of IMF credit facilities.

Beginning with January 2000, the data are compiled in accordance with the methodology set out in the fifth edition of the IMF's Balance of Payments Manual (BPM5). The 1999 BPM5-based BOP statistics were made available together with the old 1999 BOP to provide the link for analytical purposes between the two series.

Timing: Released about two and a half months after the reference quarter.

Seasonal/focus: Not seasonally adjusted.

Revisions: Minor revisions are made concurrently with the latest release.

Comments: A closely watched series that provides some leading indication of balance of payment pressures.

Producer price index (PPI)

Source: National Statistics Office (NSO).

Description: A Paasche index (1994=100) of the producers prices of manufactured goods. The index covers 551 manufactured goods produced by 271 sample manufacturing establishments (2003 series). The weights for computing the index are revised every year based on the latest data available from the Annual Survey of Establishments/Census of Establishments (ASE/CE).

Composition of the CPI

% weighting	
Consumer prices	100.00
Food, beverages, and tobacco	55.12
Clothing	3.66
Housing and home repairs	14.69
Fuel, light, and water	5.74
Services	12.28
Miscellaneous	8.51

Timing: Eight weeks after the end of the reference month.

Seasonal/focus: Not seasonally adjusted.

Revisions: None.

Comments: Markets do not focus on this data series.

Consumer price index

Source: National Statistics Office (NSO).

Description: A monthly index which, since the latest revision in 1995, uses 1994 as the base year. The weights were derived from the 1994 Family Income and Expenditures Survey of the NSO. The market basket used to construct the 1994-based CPI for all households is a merged basket of the results of updating the 1988-based market basket, and the combined baskets of the top 70% and bottom 30% of households by income, drawn from the results of the 1994 Commodity and Outlet Survey (COS). The market basket is constructed separately for each province and selected city; the table shows the market basket for the nationwide index.

Timing: Seasonally unadjusted data are released three or four days after the reference month. A new, still experimental seasonally adjusted series is currently made available within two weeks after the reference month.

Seasonal/focus: Over-year-ago changes are the focus, but increasingly the market is also taking into account monthly changes in the seasonally adjusted index.

Revisions: None.

Comments: The central bank currently targets headline CPI as part of its new inflation-targeting framework. A core concept will eventually be adopted; this is helping to refocus market attention away from the headline index, which is subject to swings in food prices, depending on the harvests.

International reserves

Source: Bangko Sentral ng Pilipinas (BSP).

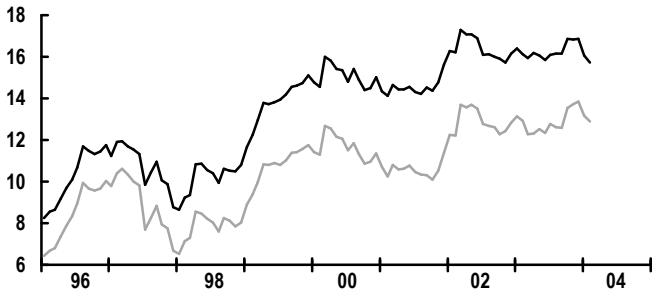
Description: Monthly data on international reserves and foreign currency liquidity are compiled in accordance with the IMF's Operational Guidelines for the Data Template on International Reserves and Foreign Currency Liquidity.

Data are disseminated in millions of US dollars and include the following prescribed components: Gross international reserves of the central bank (BSP), including foreign exchange, investments, gold, SDRs, the reserve position with the Fund (IMF), and other foreign currency assets. Net reserves reflect predetermined short-term drains on foreign exchange resources, and contingent short-term drains.

JPMorgan Chase Bank, Singapore
Sin Beng Ong (65) 6882-7143
sinbeng.ong@jpmorgan.com

Gross and net international reserves

US$ billion



The gold is revalued every month at month end, based on the current market prices in the London market closing. Other assets are revalued every month end to reflect their current market values, and accruals of earnings on interest-bearing assets are also booked at month end.

Timing: Gross reserves data are released about 10 days after the reference month. Detail is also provided on direct and contingent liabilities coming due within the next 12 months

Seasonal/focus: Monthly changes and the absolute level of gross reserves tend to be the focus. The level of usable reserves (gross reserves less direct and indirect liabilities coming due within the next 12 months) have received more focus since 2001.

Revisions: None.

Comments: The Philippines has an unusually high ratio of encumbrances on its international reserves, so that net "usable" reserves typically is less than 50% of gross reserves.

National government budget

Source: Department of Finance (DoF).

Description: Data are disseminated in millions of pesos on central government operations. The data cover budgetary and nonbudgetary (extrabudgetary) central government, referred to as "national government." (There are no social security funds operating at the central government level.) The data are presented on a consolidated basis, with transactions between the budgetary and nonbudgetary elements eliminated.

Data are disseminated on the following: revenue; expenditure; the balance (deficit/surplus); and financing broken down into foreign financing, further broken down by creditor, and domestic financing, further broken down by bank and nonbank financing and by type of debt instrument.

The data are recorded on a cash basis and are based on the actual accounting records of the credit and debit advice documents issued by the central bank and other government depository banks. The fiscal year is the same as the calendar year.

Timing: Releases about three weeks after the reference month.

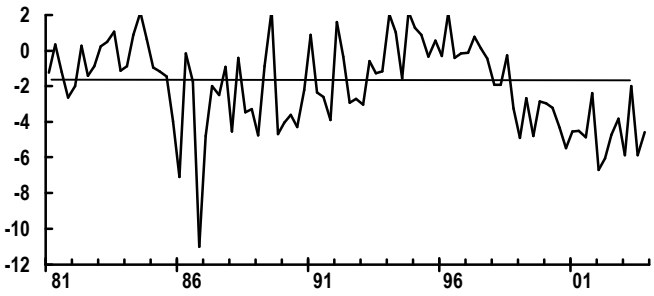
Seasonal/focus: Not seasonally adjusted. April is the key tax collection month.

Revisions: None.

Comments: Given the country's debt-to-GDP ratio of around 90% and the continual decline in the revenue-to-GDP ratio, the fiscal deficit has arguably become one of the most important data releases for the Philippines. Recently, the authorities began preannouncing quarterly deficit targets. However, the government still releases monthly data and informs the market of the past month's target only after this release. Obviously, this ex-post announcement seriously lowers the value of the actual-versus-target comparison, but the market still reacts to the gap. Recently, privatization revenues have been very small, but historically they were not, and it was important to remove these from the top-line budget in order to get a sense of recurring revenue trends.

Budget deficit

% of GDP



JPMorgan Chase Bank, Singapore
Chia-Liang Lian (65) 6882-2253
chia-liang.lian@jpmorgan.com

Singapore

The monthly data cycle

Same month	Following month	Second following month
	First week	
	Purchasing Managers Index	Retail sales
	Third week	
	External trade	
	Fourth week	
	Industrial production	
	Consumer prices	
	Money supply	
	Foreign reserves	

The quarterly data cycle

First month	Second following month	Third following month
GDP (advance)	GDP (final)	Labor market

JPMorgan Chase Bank, Singapore
Chia-Liang Lian (65) 6882-2253
chia-liang.lian@jpmorgan.com

Gross domestic product

Source: Department of Statistics

Description: Quarterly national accounts are provided in both current and constant (1995) Singapore dollar terms. The components of GDP are reported both by sector origin and expenditure type. Data are compiled in conformity with the UN's SNA standards.

GDP composition in 2003
% of total in nominal terms

Total expenditure	100
Private consumption	43
Government consumption	12
Gross fixed capital formation	25
Change in stocks	-12
Net exports	33
Statistical discrepancy	-2
Total production	100
Manufacturing	26
Construction	5
Wholesale and retail trade	13
Hotel and restaurant services	2
Transport and communications	11
Financial services	12
Business services	13
Other services	12
Others	6

Timing: The final report is released around the middle of the following quarter. An advance estimate is released one month ahead.

Seasonals/focus: GDP is provided both unadjusted and seasonally adjusted. Focus tends to be on changes compared to a year earlier, but this is progressively shifting toward quarter-on-quarter seasonally adjusted changes.

Revisions: Typically for the previous quarter only.

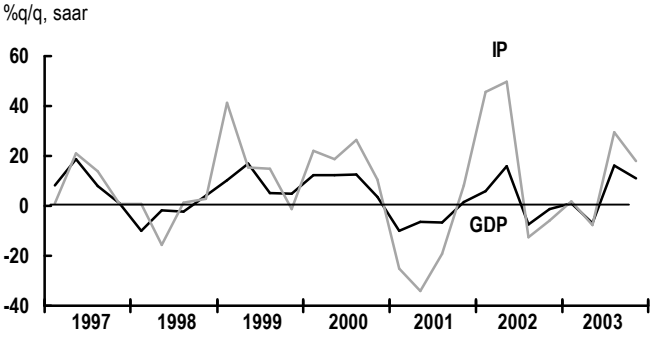
Comments: Singapore is the only country in Asia to release advance GDP estimates so early; they are based on two months' actual data and government estimates for the third month of the quarter.

Industrial production

Source: Economic Development Board

Description: A monthly index (1999=100) of industrial production volumes, computed using the fixed-weight Laspeyres formula. The weighting pattern is based on the 1998 census of industrial production. There are four main components: electronics, chemicals, biomedical science, and engineering.

Real GDP and industrial production



Composition of IP:
% weighting

Industrial production	**100.0**
Electronics	**47.8**
Semiconductors	15.6
Data storage	6.8
Info and comm products	21.4
Key modules and comp	3.8
Chemicals	**10.5**
Petroleum	4.8
Petrochemicals	2.0
Ind. and specialty chemicals	3.0
Biomedical sciences	**12.6**
Pharmaceuticals	10.7
Medical devices	1.9
Engineering	**21.0**
Precision engineering	10.6
Process engineering	5.0
Transport engineering	5.4

Timing: Released around the 26th day of the following month.

Seasonals/focus: Not seasonally adjusted. Focus tends to be on percent changes over a year ago.

Revisions: Minor revisions are made to the most recent month or two.

Comments: This high-frequency index is useful in measuring economic activity or growth on a monthly basis. In combination with retail sales and non-oil domestic exports, it gives an overall picture of the economy's cyclical position. In recent years, monthly changes have been highly volatile at times, due to the rising share of pharmaceuticals. The lumpiness of output data in this sector reflects changes in the product-mix of chemicals and high maintenance requirements of plants.

Purchasing managers index (PMI)

Source: Singapore Institute of Purchasing & Materials Management

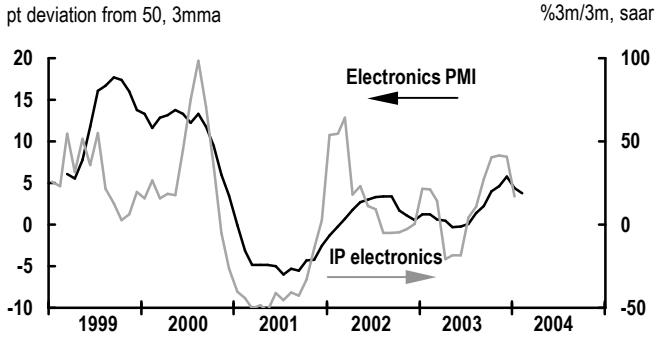
Description: The monthly Purchasing Managers' index is modeled after the PMI used in the US. It has a relatively short history, since it was officially launched in January 1999. The index is based on survey responses of purchasing managers in over 150 manufacturing companies in twelve industry groupings, weighted by each industry's contribution to GDP. A PMI reading above (below) 50 indicates that the manufacturing sector is expanding (contracting).

Timing: Released around the 4th day of the following month.

Seasonals/focus: Not seasonally adjusted. Market focus centers on the overall index and the electronics component PMI. The new orders, new export orders, inventory, and employment components are also keenly monitored.

JPMorgan Chase Bank, Singapore
Chia-Liang Lian (65) 6882-2253
chia-liang.lian@jpmorgan.com

PMI vs IP



Revisions: Rare.

Comments: Alongside IP and non-oil domestic exports, the PMI is gaining prominence as a key barometer of the domestic manufacturing economy. In addition, Singapore's is the only PMI available in Asia. This, combined with the fact that Singapore's manufacturing sector is closely linked to others in the region, make this survey a prime early indicator of developments in Emerging Asia as a whole.

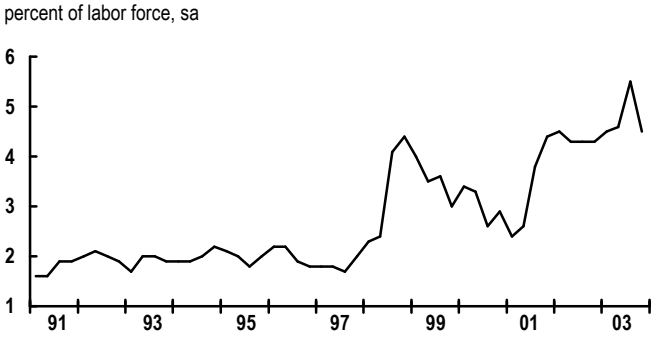
Labor market

Source: Ministry of Manpower

Description: A quarterly report on unemployment based on a survey of private households conducted by the Manpower Research and Statistics Department of the Ministry of Manpower. Following the international guidelines set out by the ILO, "employed" persons are defined as persons aged fifteen years and above, who work for pay or profit or for family gain, as well as those who have a job to return to, but are temporarily absent during the reference period.

Timing: Released around the middle of March, June, September, and December for the previous quarter.

Unemployment rate



Seasonals/focus: Seasonally adjusted data are provided. Focus tends to be on changes in the seasonally adjusted rate of unemployment.

Revisions: Rare.

Comments: The average jobless rate has historically averaged around 2%. In recent years, the unemployment rate has steadily edged higher toward the 5% level, largely reflecting the job losses as low-end production plants are relocated to cheaper cost locations overseas.

Retail sales

Source: Department of Statistics

Description: A monthly index (1997=100) of retail sales in current and constant (1997) Singapore dollar terms. The latter is deflated using the appropriate price index for each sector. The overall index is a weighted average of fourteen retail sectors (table).

Timing: Released around the 15th day of the second following month.

Composition of retail sales index:

	% weighting
Total	100.00
Department stores	13.95
Supermarkets	3.01
Provisions and sundry shops	5.92
Food and beverages	2.00
Motor vehicles	26.40
Petrol stations	3.10
Medical goods and toiletries	3.19
Apparel and footwear	7.13
Furniture, household equipment	10.47
Recreational goods	2.01
Watches and jewelry	9.11
Telephone, computers, etc.	3.56
Optical goods and books	3.81
Others	6.34

Seasonals/focus: Seasonally adjusted data are provided. However, the unadjusted figures are typically the ones highlighted in news headlines. Focus tends to be on changes over a year ago.

Revisions: Minor, if any, for the most recent month or two.

Comments: The retail sales index is useful in gauging the strength of private consumption, which typically accounts for about 40-45% of GDP. The volatility in monthly retail sales value observed from time to time reflects the lumpy movements of the automobile sector.

External trade

Source: International Enterprises Singapore

Description: A monthly report of the value of imports and exports of merchandise, reported in current and constant

JPMorgan Chase Bank, Singapore
Chia-Liang Lian (65) 6882-2253
chia-liang.lian@jpmorgan.com

(1995) Singapore dollars. Exports are customarily reported in two major groups: "domestic exports" (goods that have been manufactured or processed in the country) and "re-exports" (goods that only pass through the port en route to a final destination). Domestic exports are further broken down into oil and non-oil categories.

Timing: Released around the 17th of the following month.

Seasonals/focus: Seasonally adjusted series are provided for total trade, non-oil domestic exports, and non-oil retained imports of intermediate goods; these are available from January 1998 onward. Focus tends to be on changes in non-oil domestic exports and imports, in nominal terms, over one year earlier. Cumulative year-to-date totals expressed as percentage changes over the same year-ago period are favored as a given year progresses.

Revisions: Some adjustments for the previous two months.

Comments: The trade data are an important indicator of the overall health of the small and open Singapore economy, since the size of total trade is almost three times nominal GDP. Most attention focuses on nominal, non-oil domestic exports. Historically, deficits in the trade account of around 5% of GDP were typical, but since the mid-1990s, the trade balance has consistently been in the black, with surpluses averaging 17% of GDP between 1998-2002.

Consumer prices

Source: Department of Statistics

Description: A monthly index (1997-98=100) based on a market basket of goods and services from the household expenditure survey conducted from Nov 1997 to Oct 1998. Breakdown is provided for seven major components (table) and 37 subcomponents.

Composition of the CPI:

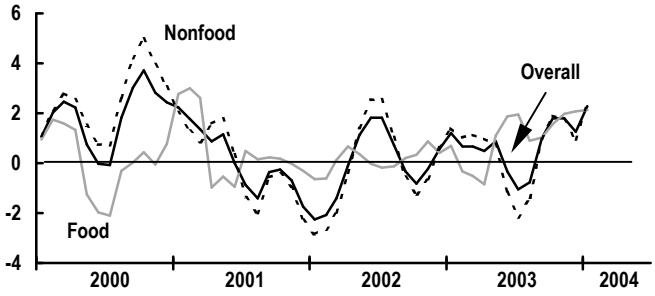
	% weighting
Consumer prices	100.00
Food	27.52
Housing	22.92
Clothing	4.43
Transp ort and communication	18.03
Education, printing, stationery	7.29
Health and medical services	3.05
Miscellaneous	16.76

Timing: Released around the 23rd of the following month
.

Seasonals/focus: The major components are provided both seasonally adjusted and unadjusted. The focus is on the change over one year earlier. Seasonally adjusted 3-month over 3-month changes are generally the best guide to underlying inflationary trends.

Consumer price indices

%3m/3m, saar



Revisions: None.

Comments: The most common indicator of price pressure in the economy, this series is watched closely by the government, the Monetary Authority of Singapore, and labor groups. Attention is paid to whether CPI increases originate from imported sources of inflation, domestic wage cost pressure, or specific supply-side interruptions.

Money supply and foreign reserves

Source: Monetary Authority of Singapore

Description: A monthly report of the stock of money and external reserves. Three major aggregates, M1, M2, and M3, represent narrow and broad measures of money supply. From November 1998, following the acquisition of POSBank by DBS, POSBank's data have been incorporated as part of the banking system whose deposits are included in M1 and M2; previously it was classified as a nonbank financial institution in M3. Foreign reserves refer to gross holdings of foreign currencies or other foreign assets by government institutions. Prior to May 1999, reserves were valued at book cost. From May 1999 onwards, the book value of foreign reserve assets is revalued at market exchange rates prevailing at the end of each reporting month.

Timing: Released around the end of the following month.

Seasonals/focus: Not seasonally adjusted. Focus tends to be on changes over a period one year ago.

Revisions: Minor, for the most recent month or two.

Comments: Singapore's openness to international capital flows and the choice of the exchange rate as the central bank's policy target necessarily imply that domestic monetary aggregates are endogenously determined. Data on foreign reserves are useful in the analysis of exchange rate and interest rate movements.

JPMorgan Chase Bank, Singapore
Chia-Liang Lian (65) 6882-2253
chia-liang.lian@jpmorgan.com

Thailand

The monthly data cycle

Same month	Following month	Second following month
	First week	
	Consumer prices	
	Second week	
	University of the Thai Chamber of Commerce (UTCC) index of consumer confidence	Car sales (or third week)
	Fourth week	
	Manufacturing production	
	Capacity utilization	
	External trade	
	Money supply	
	Labor market	

The quarterly data cycle

	Third following month
	Gross domestic product

The weekly data cycle

	Friday
	Foreign exchange reserves

JPMorgan Chase Bank, Singapore
Chia-Liang Lian (65) 6882-2253
chia-liang.lian@jpmorgan.com

Gross domestic product

Source: National Economic and Social Development Board.

Description: Quarterly national accounts are provided in both current and constant (1988) prices. The components of GDP are reported on both sector origination and expenditure bases. Quarterly data are available from 93Q1 onward.

Composition of GDP

% of nominal total, 2002	
Total expenditure	100.00
Private consumption	56.46
Government consumption	11.22
Gross fixed capital formation	23.04
Change in inventories	0.80
Exports of goods and services	64.73
Imports of goods and services	57.49
Statistical discrepancy	1.24
Total output	100.00
Agriculture	9.11
Mining and quarrying	2.47
Manufacturing	33.77
Electricity, gas, and water supply	3.21
Construction	2.97
Sales, repair of motor vehicles	16.34
Hotels and restaurants	5.61
Transport, storage and communic.	8.40
Financial intermediation	2.93
Real estate	3.19
Public administration	4.45
Education	3.88
Health and social work	1.97
Other community services	1.56
Household services	0.14

Timing: Released around the middle of the last month of the following quarter.

Seasonals/focus: Focus is on over-year-ago changes in unadjusted real GDP. However, seasonally adjusted series on overall GDP, consumption, government spending, and gross fixed capital formation are also published.

Revisions: Typically there are revisions to data for the most recent two quarters.

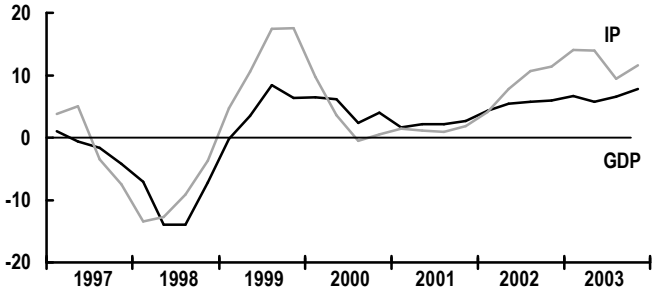
Comments: Because of the relatively late release date, other high-frequency real sector indicators, such as manufacturing production and exports tend to be used to assess the pace of economic activity.

Manufacturing production

Source: Bank of Thailand

Real GDP and industrial production

percent change over previous year



Description: A monthly index (1995=100) of the volume of production in the manufacturing sector. The overall index is a weighted average of the production volumes of forty-five items that account for 62% of total manufacturing value added. The index is based on inputs from a survey of producers, selected by the Bank of Thailand according to their market share.

Composition of manufacturing production index

% weighting, based on 1995

Total manufacturing	100.0
Foods	9.6
Beverages	10.6
Tobacco	3.0
Textiles	22.8
Petroleum products	11.5
Construction materials	4.1
Iron and steel products	3.3
Vehicles and equipt.	16.4
Electronic, electric pdts	10.3
Jewelry	5.3
Others	3.1

Timing: Released at the end of the following month.

Seasonals/focus: An overall, seasonally-adjusted series is available beginning from January 1995. However, focus is typically centered on changes over a year ago.

Revisions: Typically on data for the most recent two or three months. At the time of the first release, approximately 75% to 80% of the reports are returned and captured in the computation of the index. The remainder are added in revised figures over the subsequent two months.

Comments: The manufacturing production index is a useful and timely indicator of economic activity. The series provides a good guide to the performance of exports and domestic demand.

Capacity utilization

Source: Bank of Thailand

Description: A monthly ratio that compares the actual production level in manufacturing with each firm's own estimate of full-capacity output. Compiled based on a separate survey from the IP survey, it covers forty-three manufacturing products, accounting for 45% of the manufacturing sector's value added. Overall and sectoral capacity utilization rates are calculated based on the weighted average of capacity utilization of the forty-three industries. Survey forms are distributed to about 300 representative producers, who are expected to return the completed form by the 15th of each month.

Timing: Released at the end of the following month.

Seasonals/focus: No seasonally adjusted data are provided. Focus is typically centered on changes in the utilization rate compared with previous month.

JPMorgan Chase Bank, Singapore
Chia-Liang Lian (65) 6882-2253
chia-liang.lian@jpmorgan.com

Revisions: Occasional, for the previous month's data.

Comments: The ratio is useful for gauging the economy's capability to accommodate expansion in production, and for assessing export demand and domestic price pressure.

Automobile sales

Source: Toyota Motor (Thailand) Ltd

Description: A monthly report of domestic sales of passenger and commercial vehicles collected from all of the major car companies. Data are reported in units, and include both imported and domestically produced automobiles.

Passenger car sales

% share in 2003	
Total	100
Toyota	46
Honda	34
Nissan	6
Mitsubishi	6
BMW	2
Others	6

Commercial vehicle sales

% share in 2003	
Total	100
Isuzu	37
Toyota	30
Nissan	10
Mitsubishi	8
Mazda	3
Hino	2
Others	10

Timing: Released around the middle of the following month.

Seasonals/focus: Not seasonally adjusted. Focus thus tends to be centered on over-year-ago changes.

Revisions: Minor.

Comments: Vehicle sales are a good indicator of general consumer and business sentiment. This report has gained prominence in recent years, with the progressive relocation of automobile plants to Thailand from Japan that has made them dominant players in the market. The government aims to make the country the automotive production base for Asia.

Unemployment

Source: National Statistical Office (NSO)

Description: A monthly report on unemployment compiled from the labor force survey that has been undertaken by the NSO since 1963. The survey has been conducted on a monthly basis since 2001. (It was quarterly during 1998-2000, and prior to that period, semiannual.) "Employed persons" are defined as those 15 years of age and above who, during the survey week: worked at least one hour for wages, profits, dividends, or any type of payment in kind; did not work at all, but had regular jobs, business enterprises, or farms from which they were temporarily absent because of injury, vacation or holiday, strike or lockout, bad weather, seasonal or other short-term factors; or worked for at least one hour without pay in business enterprises or on farms owned or operated by household heads or members.

Timing: Released around the end of the following month.

Seasonals/focus: Not seasonally adjusted. Focus tends to be on the change in the number of employed persons from the previous month.

Revisions: Minor.

Comments: Data frequency has improved in recent years.

Consumer confidence

Source: University of Thai Chamber of Commerce (UTCC)

Description: A monthly index, based on a private university survey, this indicator measures overall consumer sentiment about current and future economic conditions. Consumers are questioned about their assessment of the employment situation, future job prospects, and income expectations. An index figure above (below) 100 indicates that consumer sentiment is strong (weak).

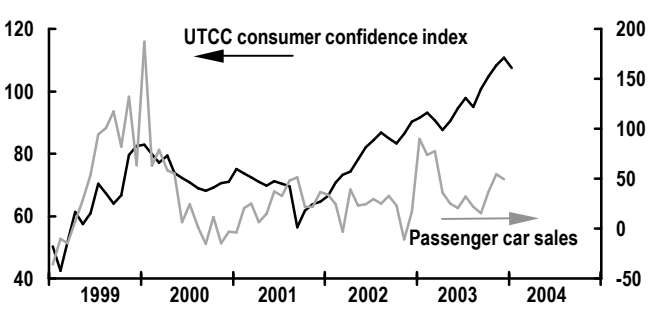
Timing: Released around the 10th of the following month.

Seasonals/focus: Not seasonally adjusted. Focus tends to be on the change from the previous month rather than the index level.

Revisions: Minor.

Comments: Despite its relatively short history (since October

Consumer confidence and motor vehicle sales



JPMorgan Chase Bank, Singapore
Chia-Liang Lian (65) 6882-2253
chia-liang.lian@jpmorgan.com

1998), the UTCC index has provided good guidance in projecting trends in household consumption.

External trade

Source: Bank of Thailand

Description: A monthly report of the nominal value of merchandise exports and imports based on customs clearance data but converted to f.o.b. basis by the Bank of Thailand. The figures are reported in both baht and US dollars. The Bank of Thailand receives monthly trade numbers from the Customs Department and then adjusts them to comply with the IMF's fifth Balance of Payments manual.

Timing: Released at the end of the following month.

Seasonals/focus: Not seasonally adjusted. Focus thus tends to be on changes in exports and imports over one year earlier. Cumulative year-to-date totals expressed as percentage changes over the same period one year earlier are favored as a given year progresses. Attention is also paid to the absolute value of the trade balance for each month and year-to-date.

Revisions: Minor.

Comments: In light of the country's relatively large trade sector, and given the late release of the GDP report, the monthly trade report is closely monitored by market analysts as an indicator of overall activity.

Consumer prices

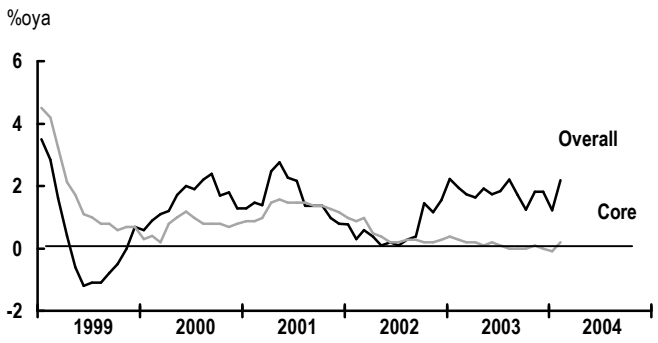
Source: Ministry of Commerce

Description: A monthly index (1998=100) of prices based on household expenditure patterns derived from a Household Expenditure Survey conducted by the National Statistical Office during the reference year. The index is normally re-based every five years. The rebasing to 1998 was carried out in January 2002. A core index is provided that excludes perishable food and energy prices.

Composition of the CPI:

% weighting	
Consumer prices	100.00
Food and beverages	38.53
Clothing and footwear	3.65
Housing and furnishings	25.85
Health and personal care	5.63
Transport and communication	16.15
Recreation, reading, education	6.72
Tobacco, alcoholic beverages	3.47

Consumer price indices



Timing: Released no later than one week after the end of the reference month.

Seasonals/focus: Not seasonally adjusted. The focus is on the change from a year earlier.

Revisions: None.

Comments: Core inflation, which is the Bank of Thailand's policy target, is increasingly the main focus within the release. Core prices account for over three quarters of the overall consumer price index.

Money supply

Source: Bank of Thailand

Description: A monthly report of the stock of narrow and broad money (M1 and M2), reported in baht terms.

Timing: Released at the end of the following month.

Seasonals/focus: Not seasonally adjusted. Focus tends to be on changes over one year earlier.

Revisions: Minor.

Comments: High money supply growth is typically seen as a driver of inflation. However, in recent years the predictive ability of monetary growth for inflation is limited, since money supply increases often reflect higher money demand caused by increases in nominal output.

JPMorgan Chase Bank, Singapore
Chia-Liang Lian (65) 6882-2253
chia-liang.lian@jpmorgan.com

Foreign reserves

Source: Bank of Thailand

Description: A weekly report of official foreign reserve holdings, including gold and SDRs, valued in US$ terms.

Timing: Released at the end of the following week.

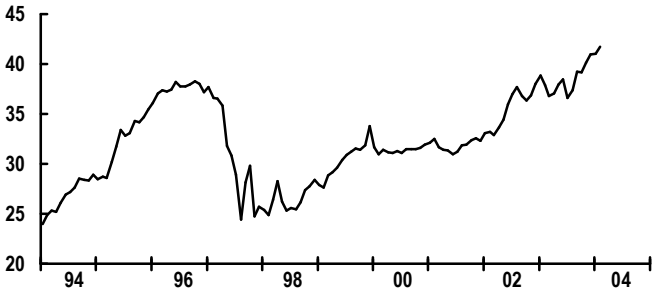
Seasonals/focus: Not seasonally adjusted.

Revisions: None.

Comments: In the short term, changes in foreign reserves are a gauge of central bank intervention in the currency market, and thus of pressure on the baht in currency markets. Recent increases are in part indicative of upward pressure from private capital movements.

Foreign exchange reserves

US$billion, eop



JPMorgan Chase Bank, Singapore
Rajeev Malik (65) 6882-2375
rajeev.malik@jpmorgan.com

India

The monthly data cycle

Same month	Following month	Second following month
	Consumer price index	Industrial production
Central govt. operations	International trade	

The quarterly data cycle

	Third following month
	Gross domestic product
	Balance of payments

The weekly data cycle

Friday	Saturday
Wholesale price index	Foreign exchange reserves
	Monetary aggregates

JPMorgan Chase Bank, Singapore
Rajeev Malik (65) 6882-2375
rajeev.malik@jpmorgan.com

Gross domestic product

Source: Central Statistical Organisation, Ministry of Statistics and Programme Implementation.

Description: A quarterly production-based measure of GDP is provided in both current and constant (FY1993/94=100) rupee terms. Annual series, for fiscal years beginning April 1, are provided for both production-based and expenditure-based GDP. The results of surveys conducted by the National Sample Survey Organization of the Ministry of Statistics and Programme Implementation are used to compile the data for many of the GDP components.

GDP composition in 2002/03

% of total	
Total GDP	100.0
Agriculture & allied	23.0
Industry	26.4
Mining	2.2
Electricity	2.5
Manufacturing	15.5
Construction	6.2
Services	50.6
Trade, transport, commun.	22.5
Finance	13.1
Community services	15.1

Timing: Quarterly GDP data are announced approximately three months after the end of the reference quarter. Advance production-side GDP estimates for the current fiscal year are reported in early February. Annual expenditure-side details become available much later, with a lag of about a year.

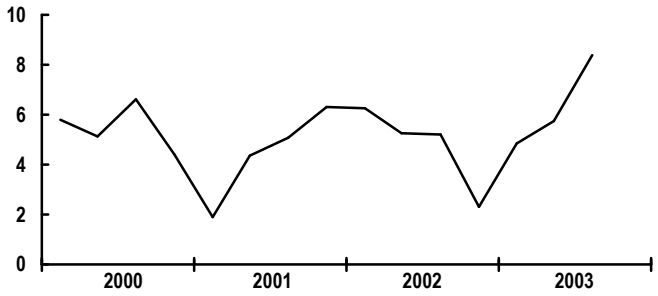
Seasonals/focus: No seasonally adjusted data are released for quarterly GDP or its components. Market focus tends to be on changes in real GDP over the same quarter of the previous year. The quarterly series exhibits significant seasonality, the most pronounced distortions being the impact of the southwest monsoon (June-September) on agricultural output for the quarter ending December.

Revisions: Revisions are common and sometimes sizable.

Comments: The details of the GDP report are important in the absence of high-frequency data to track performance in sectors other than manufacturing and agriculture. The quarterly GDP series starts from the first quarter of 1996/97. India presently uses a mix of the UN's SNA 1968 and SNA 1993 standards, and is in the process of moving toward the full implementation of the SNA 1993 methodology.

Real GDP

percent change over previous year



Industrial production

Source: Central Statistical Organisation, Ministry of Statistics and Programme Implementation.

Description: A monthly index (1993/94=100) of changes in the volume of production in the mining, manufacturing, and electricity sectors. The index covers 538 items, classified into 283 item groups. (64 items in mining, 473 items in manufacturing, and 1 in electricity). The weights for the three sectors (mining, manufacturing, and electricity) are based on gross value added in the base year.

Composition of the IP index

% weighting	
Total	100.0
Mining and quarrying	10.5
Electricity	10.2
Manufacturing	79.4
Use-based classification:	
Basic goods	35.5
Capital goods	9.3
Intermediate goods	26.5
Consumer goods	28.7
Of which	
Durables	5.4
Nondurables	23.3

Timing: Released about six weeks after the reference month, around the 12th of the second subsequent month.

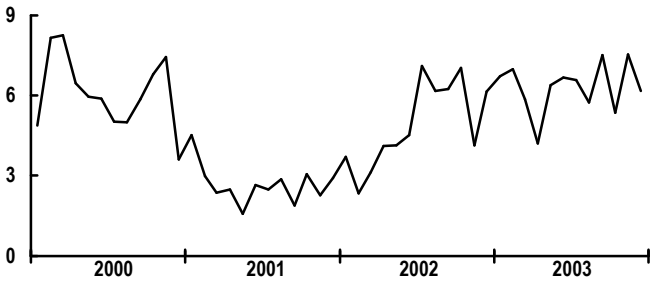
Seasonals/focus: Not seasonally adjusted. Focus tends to be on over-year-ago changes. Additionally, cumulative year-to-date totals for the fiscal year are reported as percentage change over the same period one year earlier.

Revisions: Minor revisions for the most recent month or two.

Comments: By far the most reliable indicator for measuring economic activity on a monthly basis. However, given the importance of agriculture, growth in industrial activity and GDP may not correlate. The index is usually rebased and the weights revised about every 10 years.

Industrial production

percent change over previous year



JPMorgan Chase Bank, Singapore
Rajeev Malik (65) 6882-2375
rajeev.malik@jpmorgan.com

Revisions: Data are final when first released.

Comments: CPI (IW) and WPI (see below) differ significantly in their coverage, weightings, and use. For example, foods get a weight of 57% in CPI (IW), while food articles in the primary subindex and food products in the manufactured goods subindex in the WPI have a combined weight of only 27%. Also, the fuel group has a much higher weighting in the WPI (14.2%) than in the CPI (IW) series (6.3%). Consequently, movements in international oil prices affect WPI more than CPI.

International trade

Source: Ministry of Commerce and Industry

Description: Monthly values of imports (c.i.f.) and exports (f.o.b) of merchandise, reported in current rupees based on customs clearance data.

Timing: Data are released around the first of each month for the period two months prior. A more detailed breakdown by commodity and country becomes available approximately two months after the preliminary release.

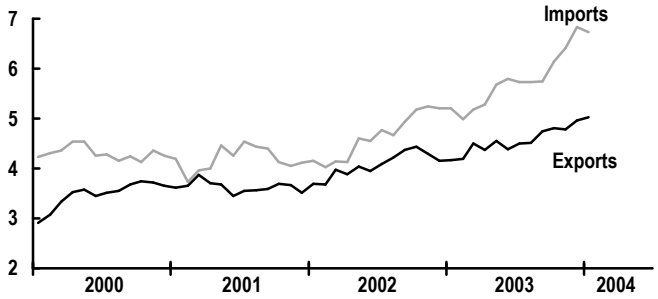
Seasonals/focus: Not seasonally adjusted. Focus tends to be on changes in exports and imports over one year earlier. Cumulative year-to-date percent changes over the same period one year earlier are favored as a given year progresses.

Revisions: Can be significant for the previous two months.

Comments: Revised monthly international data are not released. Consequently, the sum of the twelve months does not add up to the full year data. Also, seasonal adjustments of the monthly data are not reliable, owing to lack of revised data.

Merchandise trade

US$billion, 3mma, nsa



Balance of payments

Source: Reserve Bank of India

Description: Quarterly data are disseminated both in US dollars and rupees, showing both current and capital account transactions. The data are compiled in accordance with the methodology set out in the fifth edition of the IMF's Balance of Payment Manual.

Timing: Approximately three months after the end of the reference quarter.

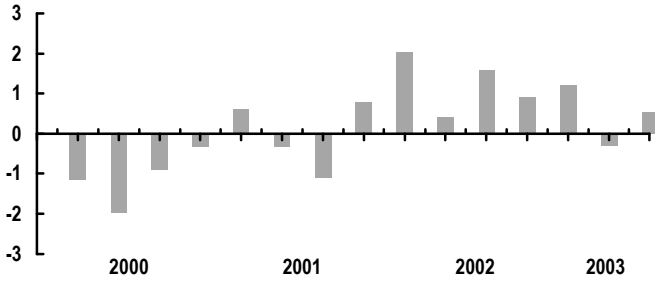
Seasonals/focus: Not seasonally adjusted.

Revisions: Data undergo minor revisions.

Comments: Sizable surpluses on invisibles balance in recent years have more than offset the trade deficits, resulting in small current account surpluses.

Current account balance

US$billion, nsa



Foreign reserves

Source: Reserve Bank of India

Description: Official holdings of gross foreign assets and gold of the central bank.

Timing: Weekly.

Seasonals/focus: Not seasonally adjusted.

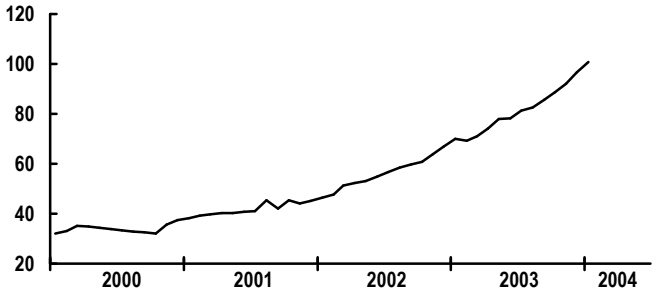
Revisions: Data are final when first released.

Comments: This is a useful indicator highlighting India's strong external liquidity profile in recent years.

JPMorgan Chase Bank, Singapore
Rajeev Malik (65) 6882-2375
rajeev.malik@jpmorgan.com

Foreign currency reserves

US$billion, eop



Wholesale price index

Source: Office of the Economic Advisor, Ministry of Commerce and Industry.

Description: A weekly index (1993/94=100) of prices for a fixed basket of goods and transactions. The index is based on a Laspeyres formula (an average with fixed weights for components based on activity in the initial, or base period). the WPI covers 435 items. Unlike the CPI (IW verson; see below) the WPI does not include services like transportation and education.

Composition of the WPI

% weighting	
Total	100.00
Primary articles	22.03
Food	15.40
Nonfood	6.14
Fuel power light	14.23
Manufactured products	63.75
Food	11.54
Beverages, tobacco	1.34
Textiles	9.80
Chemicals	11.93
Basic metals	8.34
Machinery	8.36
Transport equipment	4.30

Timing: Covers a week ending Saturday. Data are released on Sunday, with a lag of two weeks.

Seasonals/focus: Not seasonally adjusted. The focus is on over-year-ago percentage change.

Revisions: Significant revisions at times.

Comments: The WPI is the most widely used and closely watched price index, and is a key focus of financial markets and the central bank. It is the only price index available on a weekly basis with the shortest time lag of two weeks. The index is revised once every ten years.

Consumer price index

Source: Labour Bureau, Ministry of Labour for CPI (IW).

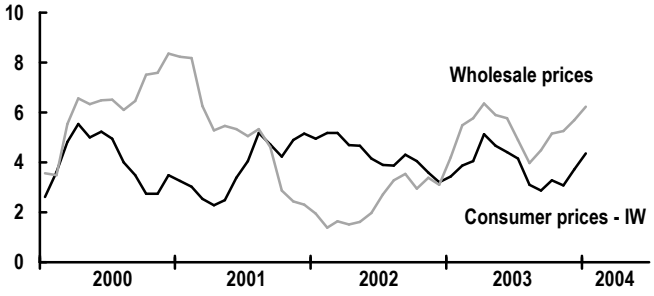
Description: There are three monthly CPI series, measuring the cost of living for industrial workers (IW), agricultural workers (AW), and urban nonmanual employees (UNME). Of these. CPI (IW) is the most widely cited, as central government employees' wage compensation (or "dearness allowance") is calculated on the basis of this index. The base year for CPI (IW) is 1982, and the weights are based on the results of the Family Income and Expenditure Survey conducted between March 1981 to July 1982.

Timing: CPI (IW) is reported with a lag of about one month, around the 30th of the following month.

Seasonals/focus: Not seasonally adjusted. The focus is on over-year-ago changes.

WPI and CPI

percent change over previous year



Central government operations

Source: Controller General of Accounts, Ministry of Finance.

Description: Detailed monthly data covering revenue and expenditure breakdown, and financing of the deficit of the central government. The fiscal year runs from April to March.

Timing: Approximately one month lag except for March (the last month of the fiscal year), when the data are released with a two-month lag.

Seasonals/focus: Not seasonally adjusted.

Revisions: Data are revised.

Comments: The data are based on the accounting records of the central government's budgetary units and are recorded on a cash basis.

JPMorgan Australia Limited, Sydney
Stephen Walters (61-2) 9220-1599
stephen.b.walters@jpmorgan.com

Australia

The monthly data cycle

Same month	Following month	Second following month
Third week	**Second week**	**First week**
Consumer confidence	Labor force	Retail trade
	ANZ job advertisements	Building approvals
	NAB monthly business survey	
	Last week	**Last week**
	Trade balance	Westpac economic indexes
	RBA credit aggregates	

The quarterly data cycle

Following month	Second following month	Third following month
Consumer price index	NAB quarterly bus. survey	National accounts (GDP)
	Wage cost index	Balance of payments
	Private new capital exp.	Business indicators

General notes on the releases described below:

The Australian Bureau of Statistics (ABS) develops monthly trend series by applying a 13-term Henderson moving average to the seasonally adjusted series. Quarterly series use a 7-term Henderson moving average.

The release time of ABS economic indicators is 11.30am Eastern standard (Canberra/ Sydney/Melbourne) time (EST). The release time for privately compiled survey releases varies and is shown individually in the following pages.

JPMorgan Australia Limited, Sydney
Stephen Walters (61-2) 9220-1599
stephen.b.walters@jpmorgan.com

Gross domestic product

Source: Australian Bureau of Statistics (ABS), publication number 5206.0.

Composition of GDP (E) in 2002

	% of total
Total GDP	100.0
Private consumption	60.2
Private dwelling investment	6.1
Private fixed investment	13.4
Public consumption	18.0
Public investment	3.6
Exports	20.7
Imports	22.1

Description: The national accounts are the prime source of information on household income and expenditure, company profits, farm sector output, government income and outlays, compensation per employee, and the saving rate. The key measure is GDP(A), which is the simple average of three measures: final expenditure in the economy (GDP [E]), value added in production (GDP[P]), and total income in the economy (GDP[I]). Constant price (chain volume) estimates are expressed in 2000-01 A$ prices, dating back to 1959. They are rebased every five years: the next change is expected in 2008, to 2005-06 prices. The chain volume measures are annually reweighted, chain Laspeyres indexes. The national accounts are compiled in accordance with the UN's 1993 *System of National Accounts* (SNA), with most of the estimates are based on sample surveys.

Timing: Usually released in the first week of the third month following the reference quarter. Release dates are available from the ABS with at least six months notice. The release time is 11.30am Eastern standard time (EST).

Seasonal/focus: All data are published in seasonally adjusted terms, although unadjusted data also are available. Data are available in both constant price and current price terms.

Revisions: Modest revisions are published in subsequent releases as more accurate or timely information becomes available. The revisions are of two types: those made to recent quarters and those made as a consequence of a redistribution across all quarters. There is no fixed program of successive release of preliminary, secondary, and final GDP estimates.

Comments: The national accounts are the prime source of detailed data on economic growth. However, the long publication lag means that release of the national accounts is seen in some quarters as "old news."

Westpac/Melbourne Institute indexes

Source: Westpac Banking Corporation and Melbourne Institute

Description: Monthly indices of economic activity. The most closely monitored of these are consumer confidence, leading and coincident indices, and inflation and unemployment expectations. For the confidence index, consumers are asked questions about the state of their personal finances and the economy. The survey publishes individual outcomes for each question. The confidence index is set with 100 as the breakeven or neutral point, where the number of pessimists equals the number of optimists. The leading and coincident indexes are compiled from previously released economic indicators from a variety of sources. These indexes are expressed as an index (1980=100), but the main focus is on monthly change. The indices are released on the Melbourne Institute website (www.melbourneinstitute.com).

Timing: Released within two weeks of the end of the survey month, except for the leading index, which lags by two months. The data are released to the media at 10.30am and are available to others from 11am.

Seasonal/focus: Not seasonally adjusted.

Revisions: Revisions are rare.

Comments: The consumer confidence index is the most closely watched survey; however, it has a patchy record as a leading indicator of consumer spending. The unemployment expectations survey has a better track record.

Business indicators (company profits)

Source: Australian Bureau of Statistics (ABS), publication number 5676.0.

Description: This quarterly business indicators publication incorporates data on company profits, inventories, and wages and salaries; the main focus is company profits. Two series are published: profits before income tax and gross operating profits. The main focus is gross operating profits. The latter removes distortions like asset revaluations and exchange-rate gains or losses. The inventory data are published in chain volume terms and are a good indicator of national accounts-based inventories. The survey is con-

JPMorgan Australia Limited, Sydney
Stephen Walters (61-2) 9220-1599
stephen.b.walters@jpmorgan.com

ducted by mail from a sample of approximately 16,000 firms, stratified by industry, state or territory, and number of employees. All private sector firms with more than 250 employees are included.

Timing: The publication normally is released at the start of the third month after the end of the reference quarter. The release time is 11.30 am EST.

Seasonal/focus: The data are published in unadjusted, seasonally adjusted, and trend terms.

Revisions: Revisions are common and usually are published in subsequent publications.

Comments: This is the best measure of the underlying trend in corporate profitability. The inventory data also are watched for implications for GDP growth estimates.

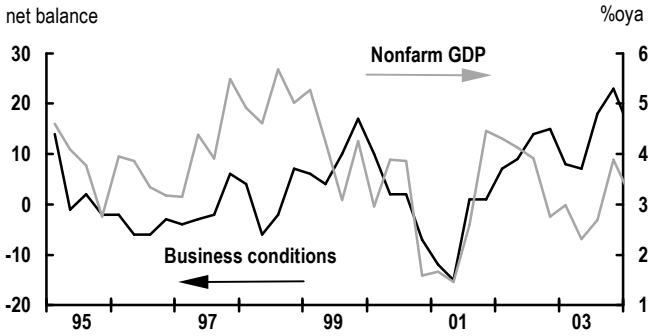
NAB business survey

Source: National Australia Bank (NAB)

Description: The NAB releases a monthly and a quarterly survey of business sentiment. The monthly survey contains estimates of business confidence and business conditions. The latter combines responses on employment, trading, and profit conditions. There also are measures on input and output pricing, capacity utilization, and orders. The quarterly publication is more detailed. Its headline results usually align closely to the previously released results for the middle month of the relevant quarter. The data are available on the NAB website (www.nabmarkets.com).

Timing: The monthly survey usually is released on the second Tuesday of the month following the end of the reference month. The quarterly survey is based on a telephone survey of 900 businesses, conducted over a two-week period in the final month of each quarter. Its results are released in the middle of the second month following the end of the reference quarter. The release time is 11.30am EST.

NAB Business Survey and nonfarm GDP growth



Seasonal/focus: Not seasonally adjusted.

Revisions: There usually are no revisions to previously published data.

Comments: The NAB survey has the reputation as one of the better leading indicators of Australia's nonfarm GDP growth. The employment measure of the business conditions index also has a good track record of predicting job growth. The prices paid and received measures can be good indicators of movements in corporate profit margins.

Labor force

Source: Australian Bureau of Statistics (ABS) - preliminary publication number is 6202.0.

Description: A monthly report on employment (broken down into full-time and part-time), unemployment (number of persons and the unemployment rate), and labor force participation. The data go back to 1978. The information is obtained from a sample of 30,000 dwellings. Each household is interviewed monthly for a period of eight months, with one-eighth of the sample being replaced each month. The first interview is conducted face to face; subsequent interviews are by telephone. The interviews usually are conducted during the two weeks beginning on the Monday between the 6th and the 12th of each month. A survey participant is considered to be unemployed if he or she is aged 15 years or over, was not employed during the reference week, was available and had actively looked for work, or was waiting to start a new job within four weeks from the end of the reference period.

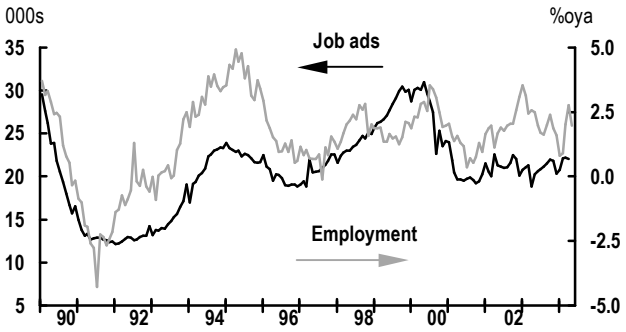
Timing: Usually released in the second week of the month following the reference month. Release dates normally are announced well in advance (at least six months); they can be changed if necessary but changes are well communicated. The release time is 11.30 am EST.

Seasonal/focus: The data are released in seasonally adjusted, unadjusted, and trend terms. They include detailed information on the labor markets in each Australian state and territory as well as nationwide figures.

Revisions: Revisions usually are modest and are included in subsequent releases of the monthly publication.

JPMorgan Australia Limited, Sydney
Stephen Walters (61-2) 9220-1599
stephen.b.walters@jpmorgan.com

ANZ job advertisements and employment growth



Comments: The sample survey has been known to produce volatile results, perhaps because of the rotation of survey participants (see above). The ABS is said to be considering a shift to quarterly publication to reduce this volatility.

ANZ job advertisements

Source: Australia and New Zealand Banking Group (ANZ)

Description: The ANZ Bank aggregates the number of job advertisements in major Australian metropolitan newspapers and on the internet. The results are published monthly, classified by ads in newspapers and on the internet. The data are released on the ANZ website (www.anz.com.au).

Timing: Usually released within two weeks of the end of the reference month. The release time is 11.30am EST.

Seasonal/focus: The data are available in seasonally adjusted and unadjusted terms. The unadjusted data are particularly volatile.

Revisions: There usually are no revisions to the published data.

Comments: The job ads data are one of the better leading indicators of employment growth. The number of job advertisements usually correlates well with the annual growth rate in total employment in the subsequent month.

Retail trade

Source: Australian Bureau of Statistics (ABS), publication number 8501.0.

Description: Monthly estimates of nominal retail turnover in each Australian state and territory. Turnover is itemized by sector of retailing (e.g., department stores, establishments selling food, clothing, and soft goods, household goods, recreational goods, hospitality), and more detailed subcategories. The data exclude spending on motor vehicles. The estimates are based on the Retail Business Survey, which includes about 6,500 retail and selected service businesses. All large businesses and a sample of smaller firms are included. In the first month of each quarter, some businesses in the sample are replaced to spread the reporting burden falling on small businesses. The ABS also releases a quarterly publication (containing the monthly data too) that includes estimates of turnover in constant prices. The deflator for the constant price estimates is advanced each June and is currently based in 2001-02. The prices used are from the previous year, except for the quarters in the latest incomplete year.

Timing: Monthly data are usually released in the first week of the second following month. The quarterly publication also is released usually within one month of the end of the reference period. The release time is 11.30am EST.

Seasonal/focus: Data are provided both in seasonally (and trading-day) adjusted terms and unadjusted. A trend measure also is reported.

Revisions: Revisions usually are released in subsequent monthly publications.

Comments: Retail turnover typically makes up around 40% of household spending in the national accounts, which in turn makes up around 60% of GDP. The retail data therefore are a valuable source of information in compiling estimates of quarterly GDP growth.

Private new capital expenditure

Source: Australian Bureau of Statistics (ABS), publication number 5625.0

Description: This quarterly survey covers all industries except agriculture, education, health, and government. It asks for actual spending in the reference period as well as firms' expectations for spending in the current and next fiscal years (which run from July to June). The survey publishes seven estimates of spending for each fiscal year, broken into spending on buildings/structures and equipment/machinery. Estimates are available by broad industry sector: mining, manufacturing, and other. Data are collected in current dollars for expected spending, and in constant price terms for actual spending. The survey is conducted by mail from a random sample of 8,000 firms, stratified by industry, state or territory, and number of employees.

JPMorgan Australia Limited, Sydney
Stephen Walters (61-2) 9220-1599
stephen.b.walters@jpmorgan.com

Timing: The survey is conducted in the eight or nine weeks after the end of the quarter (e.g., the March quarter survey is completed in April and May). Results usually are released in the second month after the end of the reference quarter. The release time is 11.30 am EST.

Seasonal/focus: The publication includes seasonally adjusted, unadjusted, and trend estimates. Seasonal reanalysis is carried out each June.

Revisions: The seasonal reanalysis process can be a source of significant revisions.

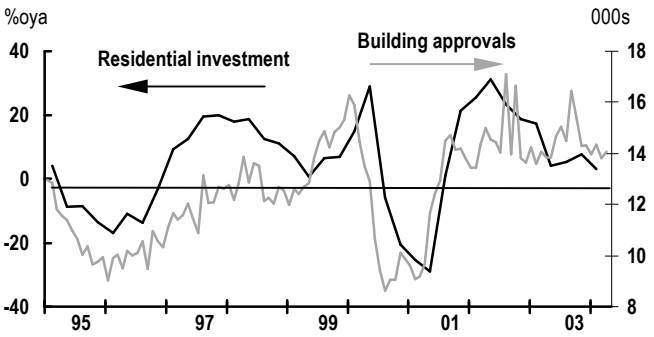
Comments: The headline total of actual spending in the past quarter gets most attention, but the forward-looking estimates of intended spending are far more important. Actual spending on plant and equipment is used as a component of investment spending in the national accounts.

Housing and building approvals

Source: Australian Bureau of Statistics (ABS), publication number 8731.0.

Description: This monthly publication uses data on the number of building construction permits issued and contracts let by the relevant local and national authorities. It also includes approvals in areas not subject to normal administrative approval (like buildings on remote mine sites). The survey includes estimates of both residential and nonresidential construction. Dwelling approvals are split into government and private; the latter split further into medium density dwellings (mainly apartments and townhouses) and houses. From July 1990 onward, the data include all approved residential building work valued at A$10,000 or more, approved alterations and additions valued at A$10,000 or more, and all approved nonresidential building jobs valued at A$50,000 or more.

Building approvals and residential investment



Timing: Released in the first week of the second following month. The release time is 11.30am EST.

Seasonal/focus: The publication includes seasonally adjusted, unadjusted, and trend estimates.

Revisions: Usually minor, based on processing and reclassification errors.

Comments: The building approvals data are the prime leading indicator of house construction. They are superior to the housing finance approvals data because they are released a week beforehand. The data usually lead housing starts by six to nine months. The medium density component usually is more volatile than the house component.

International trade in goods and services

Source: Australian Bureau of Statistics (ABS), publication number 5368.0.

Description: Monthly estimates of the value of goods and service credits (exports) and debits (imports), reported on a recorded trade basis, and the balance of trade in goods and services, reported on a balance of payments basis. Credits are broken down into services and goods, the latter classified into rural, nonrural, and other goods. Debits are classified as services and goods, the latter classified into consumption, capital, and intermediate goods. The estimates are compiled from information submitted by exporters and importers or their agents to the Australian customs service. Data are reported in Australian dollars.

Timing: Released in the last week of the second month following. The release time is 11.30am EST.

Seasonal/focus: The data are available in seasonally adjusted, unadjusted, and trend terms.

Revisions: Adjustments for coverage, timing, and valuation are made to convert some data into the balance of payments format.

Comments: The original estimates are volatile so emphasis should be on the seasonally adjusted estimates. However, even the seasonally adjusted trade balance data can be volatile, mainly because estimates on the import side can be influenced by "lumpy" items such as aircraft.

JPMorgan Australia Limited, Sydney
Stephen Walters (61-2) 9220-1599
stephen.b.walters@jpmorgan.com

Balance of payments and net external assets

Source: Australian Bureau of Statistics (ABS), publication number 5302.0.

Description: This publication contains quarterly estimates of Australia's current account deficit and net foreign debt, each of which is valued in Australian dollars. Monthly data (see above) published earlier cannot be used to estimate the quarterly outcome because the quarterly data are compiled using different seasonal factors. Net foreign debt is expressed as the net international investment position, i.e., the sum of net equity and net debt positions.

Timing: Released at the start of the third month following the reference quarter. The release time is 11.30am EST.

Seasonal/focus: The data are published in unadjusted, seasonally adjusted, and trend terms.

Revisions: Revisions are common and are published in subsequent quarterly publications.

Comments: The publication is particularly useful because it discloses net exports' contribution to GDP growth well ahead of the release of the national accounts. The net foreign debt position is a focus of politicians but not usually of the financial markets.

Consumer price index (CPI)

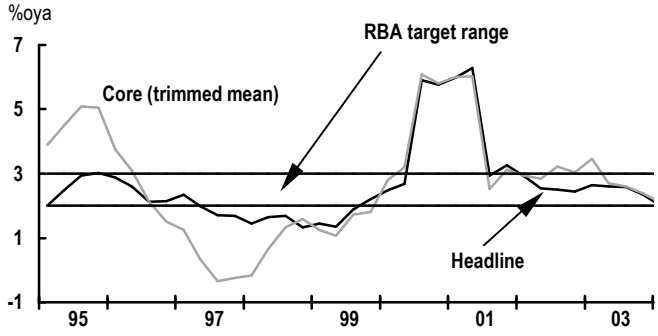
Source: Australian Bureau of Statistics (ABS), publication number 6401.0.

Description: The quarterly CPI publication is the major source of price information. It contains estimates of retail price changes across a broad range of categories, including food, alcohol and tobacco, clothing and footwear, housing, household goods, health, transportation (including petrol prices), communication, recreation, and education. There are 89 expenditure classes. Indices (1989-90=100) are compiled for the eight major capital cities and a weighted average national measure is constructed from these. The frequency of price collections varies: prices are collected monthly for goods such as milk, bread, meat, seafood, fresh fruit and vegetables, petrol, alcohol and tobacco and holiday travel. For less volatile items, quarterly price collections are undertaken, most of them in the first two months of the quarter. The ABS publishes a series of measures of core inflation which exclude factors such as housing, fruit and vegetables, and automotive fuel.

Composition of the CPI

% weighting	
Consumer prices	100.0
Food	17.7
Alcohol and tobacco	7.4
Clothing and footwear	5.2
Housing	19.7
Household furnishings	8.1
Health	4.7
Transportation	15.2
Communication	2.9
Recreation	12.3
Education	2.7
Miscellaneous	4.0

CPI: headline and core



Timing: Released before the end of the second month after the reference quarter. The release time is 11.30am EST.

Seasonal/focus: The CPI data are not seasonally adjusted. Focus is on changes over a year earlier.

Revisions: There may be revisions to previously published data due to reclassifications or errors, but these are rare and would be included in subsequent publications.

Comments: The measures of core inflation known to be favored by the Reserve Bank, and which have been most widely accepted, are the trimmed mean and weighted median. These measures exclude "outlying" price changes to arrive at a core measure, rather than excluding a fixed category like energy or food prices. The latter can be calculated from published data and CPI weights.

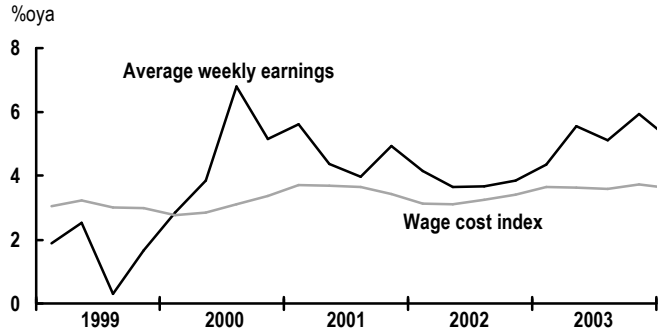
Wage cost index (WCI)

Source: Australian Bureau of Statistics (ABS), publication number 6345.0.

Description: Monthly estimates of average hourly rates of pay excluding bonuses, for private and public sector workers, for each Australian state and territory and nationwide. The estimates are compiled from hourly wage and salary

JPMorgan Australia Limited, Sydney
Stephen Walters (61-2) 9220-1599
stephen.b.walters@jpmorgan.com

Labour costs: average earnings and the wage cost index



rates for a sample of employees based on a survey of employers. The result is expressed as an index (1997=100). All employing organizations are surveyed except enterprises primarily engaged in farming, forestry and fishing, private households employing staff, and foreign embassies and consulates. Around 20,000 jobs are priced each quarter from the selected employers.

Timing: Released towards the end of the second month following the reference quarter. The release time is 11.30am EST.

Seasonal/focus: The data are released in seasonally adjusted, trend and unadjusted terms.

Revisions: Revisions usually are small and are published in subsequent quarterly publications.

Comments: The wage cost index is an alternative measure of labor costs that has come to be favored over average weekly earnings. The latter is no longer as favored because it does not adjust for compositional changes in the work force, such as the growing share of higher paid workers. The WCI does make such adjustments, and so is perceived to be a better measure of underlying labor costs.

Reserve Bank credit aggregates

Source: Reserve Bank of Australia (RBA)

Description: Monthly estimates of lending by all financial intermediaries (bank and nonbank), split into three categories: lending for housing, other personal loans, and business lending. The data are compiled from information submitted to the RBA by lending and credit institutions.

Timing: Released on the Reserve Bank website (www.rba.gov.au) at 11.30am on the last day of each month, for the reference period ending one month earlier.

Seasonal/focus: The data are available in seasonally adjusted and unadjusted terms.

Revisions: There have been a number of breaks in the historical series that require adjustment to build a linked historical series.

Comments: The credit aggregates may provide additional insight to the monetary policy outlook because the RBA has access to the data before it is published. The credit aggregates currently are a major focus of policy because of their close relationship to house prices.

JPMorgan Australia Limited, Sydney
Stephen Walters (61-2) 9220-1599
stephen.b.walters@jpmorgan.com

New Zealand

The monthly data cycle

Same month	Following month	Second following month
Third week	**Second week**	**First week**
NBNZ business sentiment	Retail trade	Overseas merchandise trade
	Third week	
	ANZ job advertisements	
	Last week	
	Residential building consents	

The quarterly data cycle

Following month	Second following month	Third following month
Consumer price index	Household labor force	Gross domestic product

JPMorgan Australia Limited, Sydney
Stephen Walters (61-2) 9220-1599
stephen.b.walters@jpmorgan.com

Gross domestic product

Source: Statistics New Zealand (StatsNZ).

Description: The quarterly GDP series are presented in nominal and real terms, the latter chain-linked and expressed in average prices for 1995-96. Estimates are published for both expenditure- and production- based GDP. The expenditure series typically shows more volatility and is subject to timing and valuation problems. For these reasons, the production-based measure is the preferred measure for quarter on quarter and annual changes.

Composition of GDP, expenditure

	% of total in 2002
Total GDP	100.0
Private consumption	58.9
Private dwelling investment	5.3
Private fixed investment	15.7
Public spending	17.8
Exports	32.8
Imports	31.8

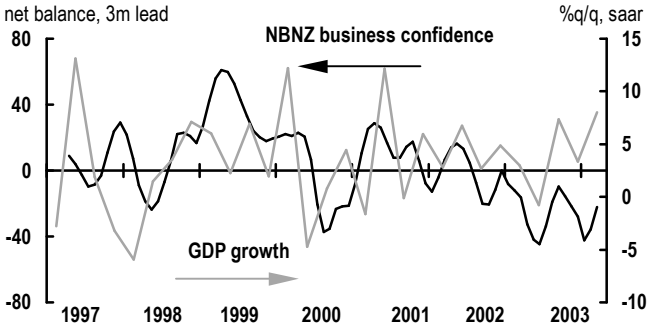
Timing: Released towards the end of the third month following the end of the quarterly reference period. Release dates are available well in advance from StatsNZ. The release time is 10:45am.

Seasonal/focus: The data are available in seasonally adjusted and unadjusted terms.

Revisions: Revised each quarter as additional data become available. Weights used to combine series totals are updated annually with the release of the December quarter data (i.e., each March).

Comments: The production figures are used as the headline measure of GDP outcomes, but the expenditure measures typically are used in forecasting and analysis.

Business confidence and GDP growth



National Bank business sentiment

Source: National Bank of New Zealand (www.nbnz.co.nz).

Description: A monthly survey (excluding January) of 1,500 businesses across New Zealand. Respondents are asked their views on where New Zealand's economy will be headed over the next 12 months. The survey also includes questions on exports, sales, investment intentions, construction intentions, the labor market outlook, inflation expectations, interest rate outlook, and firms' own outlook for financing, profits, and capacity utilization. The results are expressed as a net percent balance of "optimistic" less "pessimistic" responses to each question.

Timing: The survey results are released within a week or so of the survey being conducted. The release time is 1:00am New Zealand time.

Seasonal/focus: Not seasonally adjusted.

Revisions: None.

Comments: Typically this is the business survey that receives the most attention from financial markets.

Household labor force survey

Source: Statistics New Zealand (StatsNZ).

Description: This quarterly report is based on the household labor force survey (HLFS) that was started in 1985 and provides estimates of employment, unemployment, and persons not in the labor force. The HLFS samples 15,000 private households from rural and nonrural areas throughout New Zealand. One eighth of the sample households is rotated out of the survey each quarter and replaced by new households. Up to and including the March quarter of 1995, the survey included a sample of individuals living in non-private dwellings (e.g., hotels and boarding houses), but these now are excluded. A person is considered unemployed if, in the survey week, he or she was without a paid job but available for work, and had sought work in the four weeks ending with the reference week.

Timing: Released in the middle of the second month following the reference quarter. The release time is 10.45am.

JPMorgan Australia Limited, Sydney
Stephen Walters (61-2) 9220-1599
stephen.b.walters@jpmorgan.com

Seasonal/focus: The data are seasonally adjusted. Each series is seasonally adjusted separately, so the sum of estimates for employment, unemployment, and persons not in the labor force do not equal the working age population.

Revisions: Small revisions are made quarterly as new information becomes available. Updated seasonal factors are applied each quarter, which means that previously published data may change slightly each quarter.

Comments: These are the most closely watched series on New Zealand's labor market. Since revisions typically are small, the data are perceived to be reliable.

ANZ job advertisements

Source: Australia and New Zealand Bank (www.anz.co.nz).

Description: Monthly aggregates of the number of newspaper and internet job advertisements. Data are obtained from seven major metropolitan newspapers and from six internet job advertisements websites based in New Zealand. They are published monthly on the ANZ bank's website. The release time is 1:00 am New Zealand time.

Timing: Released in the third week of the month following the reference month.

Seasonal/focus: The data are published in seasonally adjusted and trend terms.

Revisions: Rare.

Comments: This the best leading indicator of employment trends in New Zealand. The addition of internet job ads is recent, however, and the internet results are not necessarily a reliable indicator of labor market trends.

Job advertisements and employment growth

Retail trade

Source: Statistics New Zealand (StatsNZ).

Description: A monthly report of retail trade values based on a sample survey of 4,000 representative retail establishments with turnover above NZ$30,000. The survey collects turnover information from stores categorized as: retailers of food, footwear, clothing and soft goods, furniture, appliance, hardware; chemists, department stores, cafes and restaurants, accommodation and hotels; sellers of motor vehicles, auto servicing, personal and household services, and recreational goods.

Timing: The data usually are released in the middle of the second month following the reference period. The release time is 10.45am.

Seasonal/focus: Published data are seasonally adjusted, but unadjusted data also are available.

Revisions: Revisions are made whenever new or additional information is collected.

Comments: The monthly survey receives the most market attention, although the quarterly volume series can influence estimates of quarterly GDP.

Residential building consents

Source: Statistics New Zealand (StatsNZ).

Description: A monthly report of the number and value of new buildings authorized based on data obtained from all territorial authorities. Each building is classified according to its main intended function; but, from June 1996, the floor area of a building with more than one purpose is divided proportionately among the building's main functions. Since March 1998, an apartment series has been published. The broader building consents system, which was introduced in 1993, includes coverage of some government building, as well as on-site drainage and reticulation work.

JPMorgan Australia Limited, Sydney
Stephen Walters (61-2) 9220-1599
stephen.b.walters@jpmorgan.com

Timing: Published at the end of the month following the end of the reference month. The release time is 10.45am.

Seasonal/focus: The consents data are adjusted to remove seasonal distortions. Before seasonal adjustment, large outlying building consent values are removed. StatsNZ also publishes a trend series.

Revisions: All seasonally adjusted data are subject to revisions as new information becomes available.

Comments: The building consents data are the main forward indicator of residential construction in New Zealand. However, the data seldom move financial markets unless they produce an unexpected large monthly change.

Overseas merchandise trade

Source: Statistics New Zealand (StatsNZ).

Description: A monthly report on overseas trade sourced from export and import entry documentation lodged with the New Zealand Customs Service. Exports (f.o.b.) and imports (c.i.f.) are reported in NZD using weekly average exchange rates for exports and fortnightly average exchange rates (set by Customs) for imports. Exports are included based on the date of exporting (prior to 1997 it was the clearance date), while imports are included when the goods are cleared by Customs.

Timing: Usually released at the start of the third month following. The release time is 10.45am.

Seasonal/focus: StatsNZ prepares seasonally adjusted and trend data series.

Revisions: Revised regularly, whenever new information becomes available or seasonal factors change.

Comments: Not a significant focus for financial markets unless there are large surprises in the monthly outcomes.

Consumer price index

Source: Statistics New Zealand (StatsNZ).

Description: The quarterly CPI (1999=100) measures prices of goods and services purchased by households, with composition and weights based on a household expenditure survey conducted in 2001 (the previous survey was in 1997). Prices are collected weekly, monthly, quarterly, or annually depending on the average frequency of price changes for each category. StatsNZ prepares a monthly index for the food group; all other indices are published quarterly. StatsNZ publishes quarterly subindexes for housing, household operation, personal and health care, recreation and education, tobacco and alcohol, credit services, apparel, food, and transportation. Prices are collected in 15 urban areas and are assumed to represent price movements across New Zealand. StatsNZ also publishes several nonheadline measures of price change, including: all groups less food, all groups plus interest, and all groups plus seasonally unadjusted fruit and vegetables.

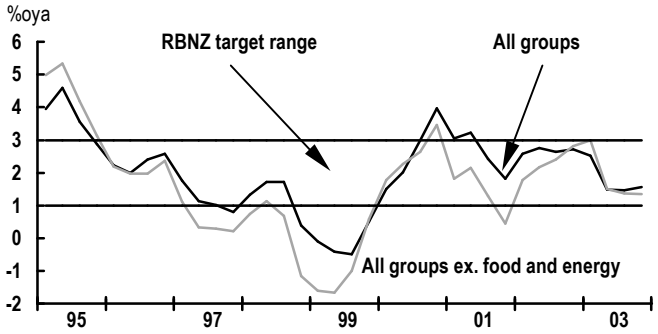
Timing: Published in the middle of the month following the end of the reference quarter. Release time is 10.45am.

Seasonal/focus: Special adjustment is made to prices of goods and services that exhibit marked seasonal patterns, like fresh fruit and vegetables. Other prices are not seasonally adjusted.

Revisions: There usually are no revisions to previously published data.

Comments: The CPI is a closely watched indicator of price pressures in New Zealand and can move financial markets significantly if the data surprises market expectations. The RBNZ targets an All Groups (headline) inflation rate of 1% to 3% (on average over the medium term) in its operation of monetary policy. Before September 2002, the RBNZ's target was 0% to 3% over a 12 month period. StatsNZ publishes various measures of core inflation, which are calculated by the exclusion method (e.g., "all groups less food").

CPI and the RBNZ target range



JPMorgan Chase Bank, Johannesburg
Marisa Fassler (27-11) 507-0376
marisa.fassler@jpmorgan.com
Francis Beddington (44-20) 7777-3770
francis.beddington@jpmorgan.com

South Africa

The monthly data cycle

Following month	Second following month	Third following month
First half	**First half**	**First half**
Investec PMI	Mining production	Retail sales
New vehicle sales	Manufacturing prod	
Fx Reserves		
Second half	**Second half**	**Second half**
Consumer prices		
Producer prices		
Money supply		
Trade balance		

The quarterly data cycle

	Second following month	Third following month
	GDP	Balance of payments
		National accounts

JPMorgan Chase Bank, Johannesburg
Marisa Fassler (27-11) 507-0376
marisa.fassler@jpmorgan.com
Francis Beddington (44-20) 7777-3770
francis.beddington@jpmorgan.com

Gross domestic product

Source: Statistics South Africa (Stats SA), South African Reserve Bank (SARB)

Description: Stats SA compiles quarterly GDP statistics based on the production side of the economy; these are derived as the sum of value added in individual sectors. The SARB compiles the expenditure side of the quarterly national accounts and these figures are released in the SARB Quarterly Bulletin. Both sets of accounts are published in nominal rand and in real (1995 rand) terms.

Composition of GDP
% of 2002 nominal value added

Total GDP	100.00
Finance, real estate, bus. services	19.48
Manufacturing	18.24
Gen. government svces.	15.81
Wholesale, retail trade; hotels and restaurants	13.28
Transport, communication	9.62
Mining and quarrying	8.07
Agriculture, forestry, fishing	3.77
Community, social, personal svces.	3.11
Construction	2.76
Electricity and water	2.39
Other	2.86

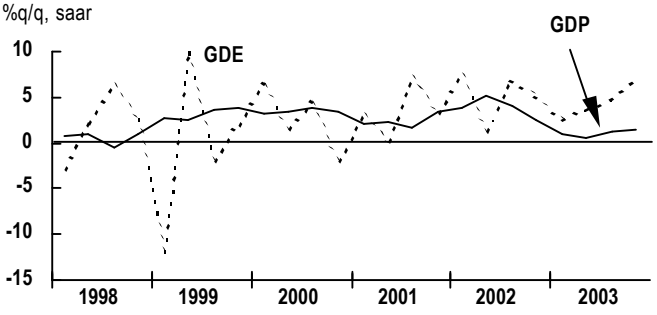
Timing: The Stats SA GDP estimates are released 6-8 weeks after quarter end. The SARB *Quarterly Bulletin* is usually published in the middle of the third month after quarter end.

Seasonal/focus: Reported on both seasonally adjusted and unadjusted bases. The focus is on the quarter-on-quarter seasonally adjusted annualized change.

Revisions: Stats SA revises, benchmarks and rebases the GDP estimates every five years. In November of each year, Stat SA also publishes revised annual GDP estimates for the previous two years, which incorporate data that were not available for the preliminary release.

Comments: The GDP releases are a key economic indicator for financial markets.

Real GDP and domestic demand



Manufacturing production

Source: Statistics South Africa (Stats SA)

Description: A monthly index (2000=100) of the physical volume of manufacturing output (value of manufactured products deflated by appropriate subindices of the PPI). Based on a survey of manufacturing firms in the public and private sector. The indices are rebased every five years.

Timing: Released on the first or second Tuesday of the second following month.

Seasonal/focus: Reported on both seasonally adjusted and unadjusted bases. Focus tends to be on sa monthly comparisons and nsa over-year-ago comparisons. Stats SA also reports the 3 month over 3 month growth rate for the sa index.

Revisions: Revised on a monthly basis.

Comments: This is an important leading indicator for the GDP release, but it is not as closely followed by financial markets as some other releases.

Mining production

Source: Statistics South Africa (Stats SA)

Description: A monthly index of the physical volume of mining output (table). The index is also published excluding gold.

Composition of mining index
% weighting

Mining production	100.0
Platinum	27.6
Gold	25.7
Coal	20.0
Diamonds	8.4
Other	18.3

Timing: Released the same day as the manufacturing statistics, i.e., with a two-month lag.

Seasonal/focus: Reported on both seasonally adjusted and unadjusted bases. Focus tends to be on m/m, sa comparisons and nsa, oya comparisons. Stats SA also reports the 3m/3m growth rate for the seasonally adjusted index.

Revisions: Revised on a monthly basis.

Comments: This is not a market-moving release as the series tends to be quite volatile. However, the numbers do provide some indication of the contribution of the mining sector to GDP growth.

Capacity utilization in manufacturing

Source: Statistics South Africa (Stats SA)

Description: A quarterly estimate of the percentage utilization of productive capacity based on a survey of manufac-

JPMorgan Chase Bank, Johannesburg
Marisa Fassler (27-11) 507-0376
marisa.fassler@jpmorgan.com
Francis Beddington (44-20) 7777-3770
francis.beddington@jpmorgan.com

turing firms in the private and public sectors. The figures are broken down according to industrial sector.

Timing: The survey is collected for the months of February, May, August, and November and is released with a lag of three months.

Seasonal/focus: Seasonally adjusted.

Revisions: Periodic.

Comments: This series has little market impact when it is released, but the numbers can influence monetary policy decisions of the Reserve Bank. The monetary policy committee (MPC) of the SARB usually quotes the latest capacity utilization figures in its statements.

Investec Purchasing Managers Survey (PMI)

Source: Investec Asset Managers and the Bureau for Economic Research (BER)

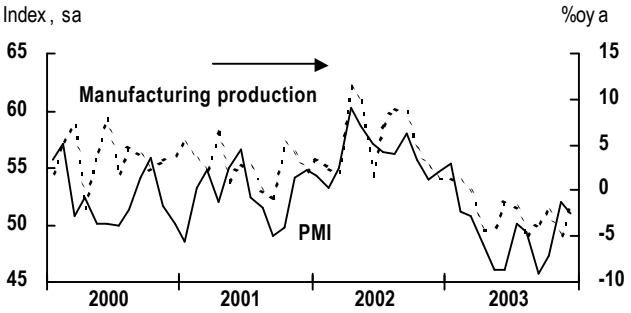
Description: A monthly survey of business conditions in manufacturing based on the PMI produced by the National Association of Purchasing Managers (NAPM) in the US. The index is compiled by the BER in conjunction with the Institute of Purchasing Managers in South Africa.

The survey questions focus on: business activity (production), new sales orders, inventories, purchasing commitments, supplier deliveries, purchasing prices, and purchasing conditions. The index is constructed as the sum of the percentage of respondents that indicated an increase plus one-half of the percent saying no change. The index thus ranges between 0 and 100, with a value of more than 50 indicating increased activity.

Timing: Released on the first working day of the following month.

Seasonal/focus: Reported on both seasonally adjusted and unadjusted bases.

Manufacturing production and the PMI



Revisions: None.

Comments: One of the most timely data releases in South Africa. The data are only available from September 1999, but it is gaining in importance as a leading indicator for the performance of the manufacturing sector.

Retail trade

Source: Statistics South Africa

Description: A monthly report of sales at private retailing firms, based on a survey that covers about 3,000 firms every month. The values include VAT. They are reported in both nominal and real (1995=100) terms, the latter deflated using CPI inflation.

Timing: Released in the first two weeks of the third following month.

Seasonal/focus: Data are released on both seasonally adjusted and unadjusted bases. Focus is on nsa, oya change and sa, 3m/3m change.

Revisions: None.

Comments: The figures provide a useful gauge of household demand and are a key input into GDP estimates. They are too out of date to have much market impact; new car sales and private credit extension are considered more timely indicators of demand.

New vehicle sales

Source: National Association of Automobile Manufacturers of South Africa (NAAMSA)

Description: A monthly series showing the number of passenger cars and commercial vehicles sold. Commercial vehicles are broken down into light (pickup trucks and minibuses), medium, and heavy (heavy trucks and buses).

Timing: Usually released in the first week of the following month.

Seasonal/focus: Focus is on nsa, oya growth rates. Vehicle sales are sensitive to changes in interest rates and taxes.

Revisions: None.

Comments: Although volatile, the series provides a timely indicator of domestic demand: the new car sales numbers reflect changes in household demand and demand from car hire companies, while the commercial vehicle sales numbers give a good indication of fixed investment spending in the public and private sectors.

JPMorgan Chase Bank, Johannesburg
Marisa Fassler (27-11) 507-0376
marisa.fassler@jpmorgan.com
Francis Beddington (44-20) 7777-3770
francis.beddington@jpmorgan.com

Merchandise trade

Source: Customs and Excise on the South African Revenue Service (SARS) website.

Description: Monthly value of exports and imports according to SIC groups and region of origin or destination. The year-to-date trade balance is also given. The data are reported in rand terms.

Timing: Released on the final working day of the following month.

Seasonal/focus: Not seasonally adjusted. Import and export values are sensitive to exchange rate fluctuations, and sporadic bottlenecks at South Africa's ports make the data extremely volatile. The focus tends to be on three-month moving averages.

Revisions: None.

Comments: The trade balance is an important component of the current account so these figures are taken seriously.

Balance of payments

Source: South African Reserve Bank (SARB)

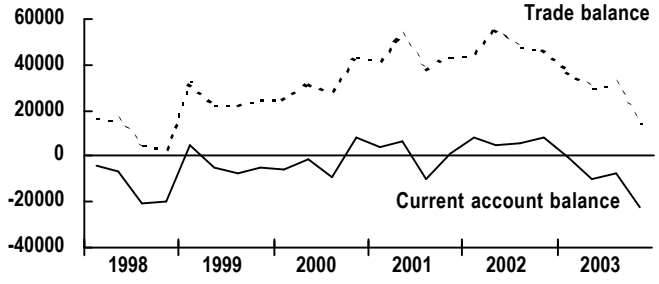
Description: Quarterly international flows for all main categories of the balance of payments, including the current account balance, following the conventions of the 5th IMF Balance of Payments Manual. The data are reported in rand terms. The capital account is shown as net flows to the public and private sectors for direct investment, portfolio flows, and other investment.

Timing: Published in the SARB *Quarterly Bulletin,* around the middle of the third month after quarter end.

Seasonal/focus: All balance of payment series are reported on a quarterly nsa basis. Current account data are also available on a seasonally adjusted annualized basis. The focus is on the rand value of the current account balance in saar terms as well as the ratio of the current account balance to GDP.

The trade balance and the currenct account

R million, saar



Revisions: Annual revisions are made in the March edition of the *Quarterly Bulletin*.

Comments: The current and capital accounts are key economic series and have been particularly important determinants of the value of the rand. Foreign listing of blue-chip South African companies abroad has also focused attention on the impact of net dividend flows on the current account. Note that the SARB Governor often reveals these data before they are officially released in the *Quarterly Bulletin*.

Official foreign reserves

Source: South African Reserve Bank (SARB)

Description: Data on gross foreign exchange reserves held by the central bank are published in the monthly statement of assets and liabilities of the Bank. The data are broken down into cash and gold holdings and are reported in rand terms. The SARB has also recently started to publish the dollar value of reserves and the international liquidity position (net reserves) in an accompanying statement on its website.

Timing: Usually released five working days after month end. Reserves are valued using the USD/ZAR exchange rate at 12:00pm on the last working day of the month.

Seasonal/focus: Since the closure of the forward book in February 2004 the SARB has been in a position to increase the US$ value of fx reserve holdings. Market focus tends to be on the change in cash reserve holdings to determine the value of dollar purchases by the SARB in the market.

Revisions: None.

Comments: The SARB has openly stated its commitment to building fx reserves to improve the country's external liquidity position. The SARB, however, purchases dollars opportunistically in the market depending on capital flows; no specific currency level is targeted by the SARB.

Consumer prices

Source: Statistics South Africa (Stats SA)

Description: A monthly index (2000=100) of prices of 1,500 consumer goods and services. The consumer basket is evaluated every five years based on the Survey of Income and Expenditure of Households. The headline CPI (for metropolitan areas) includes VAT and mortgage interest costs. The report includes the CPIX measure (for metropolitan and other urban areas), which includes VAT but excludes mortgage costs. The Reserve Bank targets 3-6% growth in the CPIX as a guide for monetary policy. The CPIX for all urban areas is 66.24% goods and 33.76% services, while

JPMorgan Chase Bank, Johannesburg
Marisa Fassler (27-11) 507-0376
marisa.fassler@jpmorgan.com
Francis Beddington (44-20) 7777-3770
francis.beddington@jpmorgan.com

the headline CPI for metropolitan areas has a smaller weight of 57.14% for goods. Stats SA is working on a CPI for the entire country, including rural areas, which will ultimately become the SARB's policy target.

Timing: Usually released on the last Wednesday of the following month.

Seasonal/focus: Reported on both seasonally adjusted and unadjusted bases. Focus tends to be on m/m, nsa and oya changes. The SARB also focuses on the q/q, saar growth rate for policy purposes.

Composition of CPIX
% weighting

Consumer prices	100.00
Goods	66.24
Services	33.76
Food	25.66
Transport	15.30
Housing	11.57
Medical care	7.70
Household expenses	5.22
Personal care	4.37
Fuel and power	4.28
Personal care	4.14
Education	3.77
Recreation	3.39
Communication	3.19
Other	11.41

Revisions: Stats SA made large revisions to the CPI numbers in 2003 after it was discovered that growth in the rental component of the index was overstated. The revisions reduced the average CPIX inflation rate for 2002 by 0.8% points. The calculation of the whole CPI index is now under review and further revisions cannot be ruled out.

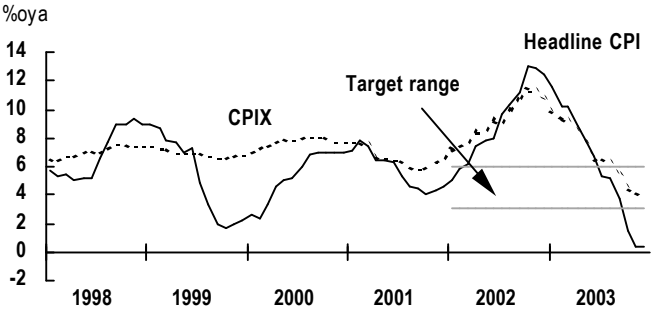
Comments: Given the SARB's inflation target the CPI release is a key statistic for financial markets. The SARB currently targets annual average CPIX inflation of 3-6%.

Producer prices

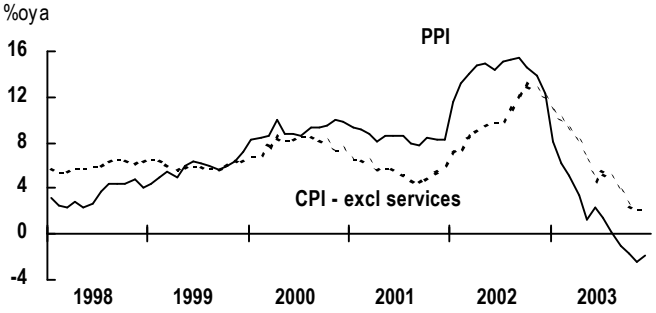
Source: Statistics South Africa (Stats SA)

Description: A monthly index (2000=100) of selling prices of both locally produced (73% of the index) and imported (23%) commodities, based on a survey of manufacturers, importers, and exporters. The indices are compiled on a gross industry basis using an average of 20 000 price quotations. The prices of all items exclude VAT.

Consumer price inflation and the inflation target range



Consumer goods prices and the PPI



Timing: Usually released on the last Thursday of the following month.

Seasonal/focus: Reported on both seasonally adjusted and unadjusted bases. The focus is on nsa, oya growth of the total index and the imported and domestic subcomponents.

Revisions: Some revisions on an ad hoc basis.

Comments: The PPI release is closely watched by financial markets to gauge future CPI inflation. The PPI is more sensitive to oil price movements than the CPI and also excludes services; however, it is a good leading indicator for goods price inflation at the consumer level.

Money supply

Source: South African Reserve Bank (SARB)

Description: A monthly series on M3 money supply (notes and coins in circulation plus all demand and term deposits of the domestic private sector) at month end. A breakdown of narrower measures of money supply, including M0 and M2 is also given.

Timing: Released towards the end of the following month.

Seasonal/focus: Reported on both seasonally adjusted and unadjusted bases. Focus is on the nsa, oya growth rate. The numbers have become more volatile in recent years in response to financial market liberalization.

Revisions: The numbers are revised from time to time.

Comments: Since the SARB has adopted a policy of inflation targeting the money supply numbers are not as important as they used to be. However, the MPC does monitor their development to assess the future inflationary impact of monetary growth. Growth in M0 can also be used as a proxy for nominal GDP growth.

JPMorgan Chase Bank, Johannesburg
Marisa Fassler (27-11) 507-0376
marisa.fassler@jpmorgan.com
Francis Beddington (44-20) 7777-3770
francis.beddington@jpmorgan.com

Private sector credit extension (PSCE)

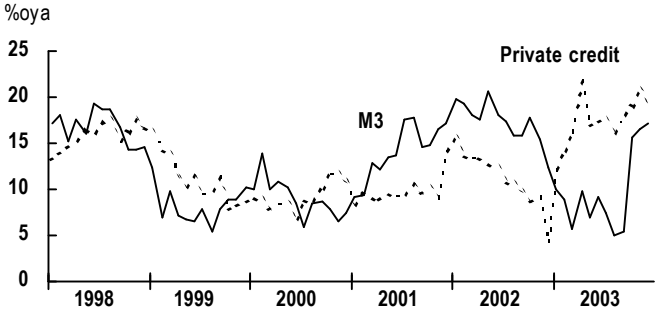
Source: South African Reserve Bank (SARB)

Description: A monthly report of credit extended to the private sector, excluding and including credit to the government sector. The total value of private-sector credit is a key driver of M3 money supply growth. Credit extension is broken down into: investments and bills discounted (which reflect investments made by the banking sector); instalment sales, leasing finance, and mortgage finance (which reflect household demand for credit); and other loans and advances (which to a great extent reflect credit extended to the corporate sector).

Timing: Released towards the end of the following month, at the same time as the money supply numbers.

Seasonal/focus: Total credit extension is reported on both seasonally adjusted and unadjusted bases, but the subcategories of are only given on an unadjusted basis. Focus is on the nsa, oya growth rate.

Broad money supply and private credit extension



Revisions: The numbers are revised from time to time.

Comments: The private credit extension figures have become an important indicator of the strength of domestic demand. Also, growth trends in the underlying categories of credit extension tell interesting stories about patterns of demand within the economy.

Government revenue, expenditure and borrowing

Source: National Treasury

Description: A monthly report of central government revenue, expenditure, extraordinary receipts and payments, financing, and cash flow. A detailed breakdown of tax receipts is given, while expenditure is broken down only into current and capital spending.

Timing: Released on the last working day of the following month.

Seasonal/focus: Not seasonally adjusted. The release is structured to enable over-year-ago comparisons on a monthly and year-to-date basis. The fiscal year runs from April to March.

Revisions: The numbers are revised annually, at the end of the fiscal year.

Comments: The market does not pay much attention to these figures, but they are a useful guide to how revenue and expenditure are performing relative to budget.

JPMorgan Chase Bank, London
Silvia Pepino (44-20) 7325-4250
silvia.pepino@jpmorgan.com