

# The Global Economy Mini-Case

# Mercedes-Benz USA

Revised: February 26, 2010

It's the first day of your summer internship at Mercedes-Benz USA. You are thrilled by the opportunity to market Mercedes to American consumers — and perhaps to get one to drive yourself — but somewhat nervous about your new job. Your boss enters your office with your first assignment: summarize the macroeconomic conditions likely to affect the US market for Mercedes over the next 12-18 months. She explains that a formal macroeconomic analysis typically guides their decisions on production, pricing, and product positioning. Your overview is the first input into that analysis.

She asks specifically that you

- Describe some of the key indicators of the US economy: Which indicators suggest faster growth in the near future? Slower? What is your overall assessment?
- Decide whether Mercedes should increase production for the US market.
- Determine the market segments likely to be strongest.
- Decide how to price cars, and whether to continue the attractive financing programs currently on offer.

#### Background information

The attached report and the following tables should guide your thinking on these questions.

## 1. GDP growth and car sales.

Automobiles — and other durable goods — are more sensitive to economic fluctuations than nondurable goods and services. You can see that in the growth rates over the last few years: as GDP growth fell, consumption of durables and sales of cars fell sharply. The following numbers were taken from the Bureau of Economic Analysis, the Federal Reserve, and IBIS.

Mercedes-Benz USA 2

Table 1	Growth	rates	(US.	%)	
- ao -					

	2004	2005	2006	2007	2008	2009
Real GDP	3.6	3.1	2.7	2.1	0.4	-2.4
Real consumption (total)	3.5	3.4	2.9	2.6	-0.2	-0.6
Real consumption (durables)	6.6	5.2	4.1	4.3	-4.5	-3.9
Auto production (units)	-6.2	2.2	1.1	-10.1	-3.5	-39.8
Mercedes sales (units)			7.2	1.3	0.2	-19.2
GM revenue (dollars)	-1.5	-2.8	4.7	-3.6	-23.4	

#### 2. Major product classes.

Mercedes-Benz USA sells a broad range of automobiles. Sedans include the C-Class (list price \$33,600), E-Class (\$48,600), and the classic S-Class (\$87,950). The range of products allows Mercedes to appeal to a wide range of income segments.

This information and more is available on the MB USA website.

### 3. Cyclical sensitivity of consumption by income group.

Just as we saw that some products are more cyclical than others, so the consumption of some consumers is more cyclical than that of others. Curiously enough, the consumption expenditures of the rich are more cyclically sensitive than the consumption expenditures of the poor. They are high — they're the rich, after all — but respond more in both directions to fluctuations in the economy. The numbers below summarize this sensitivity. If the sensitivity is 1.0, then the income group has the same sensitivity as the average consumer: if average consumption rises by 1%, so does the consumption of the group. A number greater than 1.0 indicates greater sensitivity. Thus we see, for example, that when average consumption rises by 1%, the consumption of the richest 5% rises by 2.52%.

These numbers are reported by Jonathan Parker and Annette Vissing-Jorgensen (American Economic Review, 2009). Their rationale seems to be that the rich have significantly more sensitive incomes, which translates into more sensitive consumption.

Table 2. Cyclical sensitivity of consumption by income group

	Income Group				
	Bottom 80%	Top 20%	Top 10%	Top 5%	
Consumption sensitivity	0.79	1.83	2.15	2.52	

# **United States**

- January core CPI down 0.1%; 6-month run rate for core inflation has dropped below 1.0%
- January factory output surges 1.0%; early February regional surveys point to continued solid IP growth
- Discount rate hike is technical; forecast still looks for first increase in the fed funds target rate in 2Q11

The 0.1% decline in the core CPI for January provides continued support for the forecast that the core CPI will slow from 1.7% in 2009 (4Q/4Q) to substantially below 1.0% this year. The 6-month run rate on the core CPI has already dropped to 0.8% saar. And the disinflationary forces resulting from excess slack in labor markets, real estate, and industrial capacity are now being reinforced by a shift in the direction of the trade-weighted dollar from weakening during most of 2009 to appreciation since early December.

The core PCE price index is also expected to decline 0.1% in January, and this reading would take the Fed's preferred measure of inflation to 1.2%oya and 0.8% saar over the past six months. The core PCE price index had increased an average 0.2% per month in February through April of last year. So it seems very likely that the core PCE price measure of core inflation will drop below 1.0%oya by April.

This week's increase in the discount rate is one of a series of changes aimed at normalizing Fed lending facilities. As the Fed statement indicates, the changes are "not expected to lead to tighter financial conditions for households and businesses and do not signal any change in the outlook for the economy or for monetary policy." The J.P. Morgan forecast still looks for the fed funds rate target to remain at its current low level until 2Q11, given the likely backdrop of low core inflation and high unemployment.

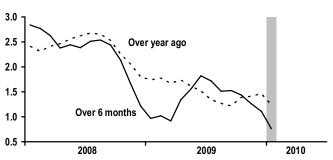
The latest round of growth data is mixed and broadly consistent with the forecast of 3.0% real GDP growth this quarter. Manufacturing IP rose 1.0% in January and the early February regional surveys point to continued strong output growth this month. But the trend in housing starts looks no better than flat, despite the reported 2.8% monthly gain in January. And the four-week average of initial jobless claims, which had been steadily declining through early January, edged higher over the past five weeks.

#### Run rate on core inflation below 1%

Higher energy prices in January lifted the CPI to a 0.2% increase. But the big news in the report is the 0.1% decline

#### Core PCE price index, with January forecast

%ch saar



#### Nonfuel import prices and real trade-weighted dollar

%ch ar, over 3 months, both scales Dollar (inverted scale) Import prices 15 -50 10 -25 5 0 0 25 -5 50 -10 -15 75 2007 2008 2009 2010

Average of New York Fed and Philly Fed manufacturing surveys

Sa

	3Q09	4Q09	Jan	Feb
Derived composite	46.2	50.7	53.0	53.7
General conditions	4.6	18.9	15.6	21.3
New orders	5.2	13.1	11.8	15.7
Shipments	2.8	15.0	16.0	17.4

in the core CPI. The core CPI measure of inflation is running 1.6% oya but only 0.8% saar over the past six months. Details of the January CPI show continued tame pricing for owners' equivalent rent (-0.1%) and rent of tenants (0.0%) and declines in some of the more volatile components of the core CPI including lodging away from home (-2.1%), airline fares (-2.5%), and new motor vehicles (-0.5%).

Higher energy prices also boosted upstream prices, the PPI and import prices, in January. And even the core PPI (up 0.3%) and nonfuel import prices (0.4%) posted relatively large increases (with increases in nonfuel import prices concentrated in materials rather than finished goods). But commodity prices have generally leveled out since early December and the trade-weighted dollar has strengthened. If sustained, these trends should dampen upstream price pressures over the next few months.

# Factory IP up 1.0% in January

Results of the ISM manufacturing survey show the factory sector turning decidedly stronger in January, and this result is confirmed by the Fed's IP report. Total industrial production rose 0.9% in January, manufacturing production rose 1.0%, and nonauto output rose 0.8%. This leaves the January level of manufacturing production 7.8% at an annual rate above the 4Q09 average, well above the 5.0% growth rate that had been penciled into the forecast.

Increases in factory output are often concentrated in motor vehicles and parts and in high-tech equipment. And these industries have been growing considerably faster than most others recently. Output of motor vehicles and parts surged 4.9% in January and production of high-tech equipment rose 1.9%. But manufacturing IP outside these industries has also been strong, up 0.7% in January and 7.4% saar over the past three months. This growth is much more rapid than in the early stages of the two prior expansions.

#### Let it snow, let it snow, let it snow

The February manufacturing surveys provide guidance to how manufacturing is holding up this month. The two early regional surveys released this past week, from the New York Fed and the Philadelphia Fed, cover activity in parts of the Northeast that were hammered by severe snowstorms earlier this month. In past years, severe snowstorms in the Northeast had significantly depressed readings for these surveys, but this February surveys held up well, and even improved substantially in the Philadelphia Fed region, where the storms had been most disruptive.

Indeed, the derived composite from the Philly Fed survey (calculated from components using ISM survey weights) rose 2.6pts to 55.1, its highest level since March 2006. New orders rose 19.5pts to 22.7 and shipments rose 8.7pts to 19.7; both were by far the strongest readings of the expansion to date. The headline reading of the New York Fed survey (assessment of general economic conditions) also increased and, at 17.6, was actually stronger than the Philly Fed survey. But respondents in the New York region indicated that their firms' growth of both new orders (8.8) and shipments (15.6) had slowed in February. Upcoming regional manufacturing surveys from the Dallas, Richmond, and Kansas City Fed regions and the Chicago PMI will go a long way toward conditioning views on the February ISM manufacturing survey.

# Housing flat at low levels

On the surface, January housing starts were also encouraging for growth. Total starts rose 2.8% and were 5.7% (not

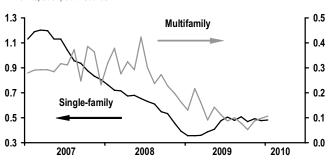
#### Manufacturing IP ex motor vehicles and high tech

%ch saar, over 3 months



#### **Housing starts**

Mn units, saar, both scales



annualized) above the 4Q09 level. But the trend in starts would more accurately be characterized as flat at low levels. Single-family housing starts did increase 1.5% in January, but this followed a 3.0% decline the month before. Single-family starts have been fluctuating in a narrow range since last June. The recent increase in starts has been in the more volatile multifamily component, which has bounced from an extraordinarily low reading in October (which was the lowest reading for multifamily starts in the history of the series dating back to 1959). Multifamily starts are off their extreme lows, but there is little reason to think that the trend is up. Rental vacancy rates are very high, and the trend in multifamily permits, including the large decline in January, is no better than flat.

The level of single-family starts built for sale has gone from 30% below the level of sales in 1H09 to only about 5% below sales in January. This means that an upswing in starts this year is likely to require significantly stronger new home sales. The Homebuilder survey for February posted 2pt gains in both the overall index and in the component measuring current sales. But the index is still at very low levels and the latest reading is hardly a convincing sign of recovery. Upcoming reports on January new home sales (Wednesday) and existing home sales (Friday) will provide more information on housing demand.

#### Data releases and forecasts

#### Week of February 22 - 26

Tue Feb 23	<b>S&amp;P/Case-Shiller home price index</b> %oya, unless noted						
9:00am	700ya, amood notod	Sep	Oct	Nov	Dec		
	20-city composite %m/m sa 10-city composite	-9.2 0.1 -8.3	-7.3 0.3 -6.4	-5.3 0.2 -4.5	<u>-3.1</u> <u>0.3</u>		
	National composite	<b>1Q09</b> -19.0	<b>2Q09</b> -14.7	<b>3Q09</b> -8.9	<b>4Q09</b> 1.2		
Thu Feb 25	<b>FHFA home price indexes</b> Purchase only						
10:00am		Sep	Oct	Nov	Dec		
	%oya %m/m sa	-3.2 -0.3	-2.1 0.4	0.5 0.7	<u>0.5</u> <u>0.4</u>		
		1Q09	2Q09	3Q09	4Q09		
	All transactions (%q/q) %oya Purchase only (%q/q sa) %oya	0.7 -3.4 -0.5 -7.1	-2.4 -4.0 -0.6 -6.0	-2.4 -4.1 0.2 -3.7	0.0 -4.1 0.6 -0.3		

Home prices as measured by the Case-Shiller and FHFA indices continued to increase in late 2009. We expect that these indices delivered further small gains in December: we forecast a 0.3%m/m increase in the Case-Shiller 20-city composite and a 0.4% gain in the FHFA purchase-only index. This would leave prices down 3.1%oya (Case-Shiller) and up 0.5%oya (FHFA).

Two other price home price measures have already been reported for December. The LoanPerformance index fell 1.0%m/m not seasonally adjusted, but we estimate that it rose 0.1%m/m on a seasonally adjusted basis. The Radar Logic 25-city price index rose 0.2%m/m not seasonally adjusted, the first increase during this period since 2004.

The Case-Shiller and FHFA reports will also include quarterly price indices for 4Q. The Case-Shiller report contains a national index, and the FHFA report contains an index based on both purchase and refi mortgages. Neither of these measures gets much attention, as they tend to be similar to the more timely monthly data.

Tue Feb 23 10:00am

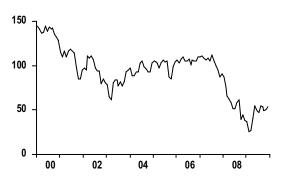
Consumer confidence Sa				
	Nov	Dec	Jan	Feb
Conference Bd index	50.6	53.6	55.9	54.5
Present situation	21.2	20.2	25.0	
Jobs plentiful	3.1	3.1	4.3	
Jobs hard to get	49.2	48.1	47.4	
Plentiful less hard to get	-46.1	-45.0	-43.1	
Expectations	70.3	75.9	76.5	

We expect that the Conference Board consumer confidence index will fall to 54.5 in February from 55.9 in January. Our forecast for a small decline in consumer confidence is related to the drop in equity prices between mid-January and early February. We have already seen the Michigan consumer sentiment index fall to 73.7 from 74.4, and the weekly ABC/WP index remains at a low level.

Probably the most important piece of information in this report will be the labor market differential, which is inversely related to the unemployment rate. The labor market differential is the share of respondents who say jobs are plentiful less the share who say jobs are hard to get. If the differential improves, as it has done in each of the last two months, then it could signal a further drop in the unemployment rate, or at least stability after a large 0.3%-pt fall in January.

#### Conference Board consumer confidence

Index, sa



Wed Feb 24 10:00am New home sales

	OCI	NOV	Dec	Jan
Total (000s, saar)	408	370	342	345
%m/m	4.3	-9.3	-7.6	0.9
%oya nsa	3.1	-3.7	-11.5	4.9
Months' supply	7.1	7.6	8.1	
Median price (%oya)	0.2	-5.1	-3.6	

We expect that new home sales edged up to an annualized pace of 345,000 in January from 342,000 in December, an increase of 0.9%. This gain is extremely minor and does little to reverse the 16.2% fall in sales between October and December. The anticipated end of the new homebuyer tax credit probably pulled sales into earlier months and then caused a fall in sales in November and December. The tax credit has been extended and expanded, but there is no definitive evidence yet that sales are rebounding. Mortgage purchase applications rose 0.5%m/m during the month, but the homebuilders' index fell to 15 from 16 (it recovered to 17 in February, which could be a sign that sales were picking up in late January).

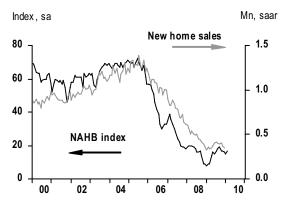
The recent weakness in home sales has caused the months' supply of new homes to rise to 8.1 in Decem-

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ber from 7.1 in October. The actual level of inventories has continued to decline over this period. The months' supply is now back to its highest level since June, and it is well above the 5-6 level that we think indicates that inventories are reasonably well aligned with sales.

Although the months' supply of homes has risen, there is still evidence that the rate of decline in median new home sale prices is moderating. The median price fell 2.9%oya in 4Q09, the smallest drop since 2Q08.

#### NAHB index and new home sales



Thu Feb 25 8:30am

Jobless claims Thousands, sa

mousand	15, 5a				
	New c	laims (wr.)	Contin	uing claims	Insured
	Wkly	4-wk avg	Wkly	4-wk avg	Jobless,%
Dec 12 <sup>1</sup>	480	468	5038	5223	3.8
Dec 19	454	466	4979	5101	3.8
Dec 26	432	460	4807	5007	3.6
Jan 2	433	450	4609	4858	3.5
Jan 9	444	441	4659	4764	3.6
Jan 16 <sup>1</sup>	479	447	4600	4669	3.5
Jan 23	472	457	4617	4621	3.5
Jan 30	483	470	4563	4610	3.5
Feb 6	442	469	4563	4586	3.5
Feb 13 <sup>1</sup>	473	468			
Feb 20	<u>465</u>	<u>466</u>			
1. Payroll s	survey we	ek.			

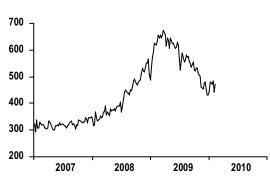
We expect that initial jobless claims pulled back to 465,000 in the week ending February 20 from 473,000 in the prior week. Claims have recently started to move sideways at a still-elevated level, a worrisome development from the standpoint of gauging labor-market conditions.

This report will include the Presidents' Day holiday, which has historically led to an increase in jobless claims. We are not predicting an increase because the rise in the prior week was large (31,000), and large swings in one direction are more often than not followed by a reversal in the next week.

Last week included major snowstorms, especially in the Northeast part of the country. Using the Northeast Snowfall Impact Scale from the NAOO, we have identified major snowstorms and found no systematic bias in claims in the week following a snowstorm.

#### Initial jobless claims

000s, sa



Thu Feb 25 8:30am

<b>Durable goods</b> %m/m sa				
	Oct	Nov	Dec	Jan
New orders	-0.1	-0.4	1.0	<u>-0.5</u>
Ex transportation	-0.5	2.0	1.4	<u>-1.8</u>
Nondef cap. gds ex air	-1.8	3.2	2.2	<u>-1.5</u>
Shipments	0.2	8.0	2.8	-0.2
Nondef cap. gds ex air	0.5	1.6	2.1	<u>-1.0</u>
Inventories	-0.3	-0.2	-0.2	

We expect a weak durable goods report in January, with new orders falling 0.5% and shipments down 1.0%. This would contrast with other manufacturing indicators, such as manufacturing production in the IP report (1.0%) and the ISM index (58.4). The main basis for our low forecast is that the durable goods report is often weak in January, even after the data are seasonally adjusted.

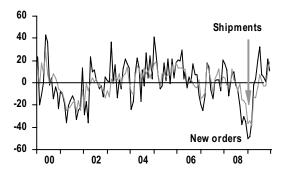
The seasonal weakness in January durable goods can be seen by comparing the average percent change in January to the average of the percent changes in the two months on either side of January. From 1993 to 2009, new orders were on average 2.5% below trend, and core capital goods orders (nondefense ex aircraft) were 4.5% below trend. Shipments were 1.5% below trend and core capital goods shipments were 3.6% below trend. In next week's report this weakness should be reflected in drops in core capital goods orders and shipments after solid gains in each of the prior two months. We expect a sizable 1.8% fall in ex transportation orders, but only a 0.5% fall in total orders. Aircraft orders fell sharply in each of the last two months, but industry data suggest that aircraft orders posted a small rise in January.

The durable goods report will contain the first hard data on 1Q inventories outside of the vehicle sector, where industry data show a rise in inventories in January. Inventory changes are of interest after destocking was sharply curtailed in 4Q. The key question for the overall economy is whether inventories will flatten out or will start to rebound. For the durable goods manufactur-

ing sector, we may continue to see inventory cuts for a while because the inventory to shipments ratio is still high in this sector.

#### Core capital goods orders and shipments

%ch over 3 months, saar



Fri Feb 26 8:30am

Gross domestic product %ch q/q saar, unless noted

			Aav	Secona
	2Q09	3Q09	4Q09	4Q09
Real GDP	-0.7	2.2	5.7	6.0
Final sales	0.7	1.5	2.2	2.0
Domestic final sales	-0.9	2.3	1.7	1.7
Consumption	-0.9	2.8	2.0	2.1
Equip. and software	-4.9	1.5	13.3	14.0
Nonres. structures	-17.3	-18.4	-15.4	<u>-13.5</u>
Residential investment	-23.2	18.9	5.7	5.3
Government	6.7	2.7	-0.2	-0.2
Net exports (%-pt contr.)	1.6	-0.8	0.5	0.3
Inventories (%-pt contr.)	-1.4	0.7	3.4	4.0
Core PCE price index	2.0	1.2	1.4	
%oya	1.6	1.3	1.4	
GDP chain price index	0.0	0.4	0.6	
%oya	1.5	0.6	0.7	
Adj. corporate profits	3.7	10.8		
%oya	-12.6	-6.6		

Adv Second

Real GDP growth in 4Q09 was probably revised up to 6.0%q/q saar in the second report from 5.7% in the advance report. The most significant factor behind the upward revision will likely be the contribution from inventories, which we expect to be revised up from an already high 3.4%-pt to 4.0%-pt. That would imply that the annualized change in real business inventories will be revised from -US\$33.5 billion to -US\$15.0 billion. This is a dramatic swing from 3Q, when inventories declined at a US\$139.2 billion pace.

Outside of the inventory revision we do not see any other major changes to GDP. We expect small downward revisions to net trade and residential investment, and small upward revisions to consumption and business fixed investment.

Fri Feb 26 9:55am	Consumer sentiment	Dec	Jan	Pre Feb	Fin Feb
	Univ. of Mich. Index (nsa)	72.5	74.4	73.7	74.0
	Current conditions	78.0	81.1	84.1	
	Expectations Inflation expectations	68.9	70.1	66.9	
	Short term	2.5	2.8	2.7	
	Long term	2.7	2.9	2.8	

Home buying conditions

Consumer sentiment was probably little changed between the preliminary and final February surveys. The index could increase very slightly given that equity prices have risen after falling to a three-month low in early February.

151.0

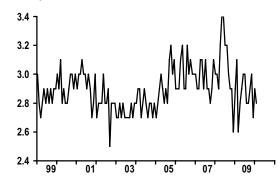
147.0

153.0

Long-term inflation expectations will be important to watch, especially after core inflation fell 0.1%m/m in January. To date, any moderation in long-term inflation expectations has been quite small: in early February and over the last 12 months, expectations were 2.8%, compared to 3.1% in the prior 12-month period and 3.0% in the year before that. If long-term inflation expectations move lower, it would reinforce the case for the maintenance of accommodative Fed policy for an extended period.

#### Michigan 5-10-year ahead median inflation expectations

% change at annual rate



**Existing home sales** 

Median price (%oya)

Fri Feb 26 10:00am

b 26 :00am		Oct	Nov	Dec	Jan
	Total (mn saar)	6.09	6.54	5.45	5.50
	%m/m	9.9	7.4	-16.7	0.9
	%oya nsa	20.6	46.3	14.7	22.5
	Months' supply (nsa)	7.0	6.5	7.2	
	Single-family	6.8	6.2	6.9	

Existing home sales plunged 16.7% in December, likely because the expected expiration of the new homebuyer tax credit pulled sales into earlier months. The credit has been extended and expanded, but there is not yet evidence that sales are rebounding to any significant degree. We expect that existing home sales increased to

-7.6

-5.7

1.5

an annualized pace of 5.50 million in January from 5.45 million in December, a rise of 0.9%. Sales had recently risen as high as 6.54 million in November.

Our forecast for a small increase in January sales draws on the December pending home sales index, which rose 1.0%m/m. The pending home sales index leads existing home sales by a month or two. It's 16.4% fall in November correctly predicted the 16.7% decline in December existing home sales.

The fall in existing home sales in December caused the months' supply to break its downward trend and to rise to 7.2 from 6.5 the previous month. The rise was checked by a drop in inventories that was more than accounted for by seasonal factors; had inventories been flat the months' supply would have risen to 7.7. Months' supply will have to drop at least into the 5-6 range before supply and demand are balanced.

The median price of existing homes sold finally rose on a %oya basis in December. Prices rose 1.5%oya, the highest reading since May 2006 and the first year-over-year increase since August 2007.

#### Pending home sales, existing home sales



#### Existing single-family: months' supply, homes for sale



## Review of past week's data

#### Homebuilders survey (Feb 16)

Sa

	Dec	Jan	Feb	
Housing market	16	15	<u>15</u>	17
Present sales	16	15		17

The National Association of Homebuilders (NAHB) survey rose to 17 in February from 15 in January. The increase in the NAHB index indicates that new home sales were probably beginning to rise again by early February after a 16.2% drop in the last two months of 2009. This is welcome news, although sales still look to be at very low levels. The NAHB index is only back to where it was in October and November 2009, and it is below the recent high of 19 in September. In 2009 new home sales peaked at a 419,000 annualized pace, which was 70% below the peak.

#### Empire State survey (Feb 16)

Diffusion indices, sa

	Dec	Jan	Feb	
General bus. conditions	4.5	15.9	<del>18.0</del>	24.9
New orders	2.8	20.5		8.8
Shipments	8.4	21.1		15.1
Unfilled orders	-21.0	2.7		2.8
Prices paid	19.7	32.0		31.9
Prices received	-9.2	2.7		4.2
Composite	48.5	53.5		52.3

The Empire State survey pointed to continued growth in manufacturing in February, but the details were mixed, as new order and shipment growth decelerated. The headline business activity index jumped to the strong level of 24.9 in February from 15.9 in January, while the ISM-weighted composite fell to 52.3 from 53.5.

#### Housing starts (Feb 17)

Mn units, saar

	Nov	Dec		Jan	
Starts Single-family starts Multifamily starts	0.58 0.49 0.09	0.56 0.46 0.10	0.57 0.48	0.57 0.48 0.09	0.59
Permits	0.59	0.65		<u>0.63</u>	0.62

The January housing starts report was constructive: the key single-family starts and permits categories both increased, starts in December were revised up, and single-family permits remained well above starts in permit-issuing areas. Both starts and permits are on track to rise this quarter, which could lead to a small increase in real residential investment spending by 2Q. Residential investment spending this quarter is likely to be about unchanged, reflecting a fall in starts last quarter.

#### Import prices (Feb 17)

%m/m nsa. unless noted

	Nov		Dec		Jan	
Import prices	- <del>1.6</del> - <del>3.7</del>	1.5 3.4	<del>-0.0</del> 8.6	0.2	<u>-0.8</u>	1.4 11.5
%oya Ex fuel import prices	<del>-3.7</del> 0.4	3.4	8.6 <del>-0.4</del>	0.3	11.0 -0.3	0.4
%oya	-1.1		<del>-0.4</del>	0.3	<del>1.5</del>	1.3

Import prices were up 1.4% in January and 11.5%oya owing to the base effects of fuel. Ex fuel prices were up 0.4%. Some of the components like industrial supplies and consumer goods ex autos showed over-year-ago gains for the first time in a year.

#### Industrial production (Feb 17)

%m/m sa, unless noted

	Nov		Dec		Jan	
Industrial production	0.6		<del>-0.6</del>	0.7	0.9	
Manufacturing	<del>-0.9</del>	1.0	-0.1		<del>-0.9</del>	1.0
Motor vehicles & parts	<del>-1.5</del>	2.2	<del>-0.1</del>	-0.3	<del>-6.8</del>	4.9
High-tech	<del>-0.1</del>	0.8	<del>-2.4</del>	1.2		1.9
Mfg ex motor vehicles	0.9		-0.1		<del>_0.6</del>	0.8
Business equipment	<del>-0.7</del>	-0.3	<del>-0.9</del>	1.3		0.9
Capacity utilization (%,sa)	<del>71.5</del>	71.3	<del>72.0</del>	71.9	<del>72.7</del>	72.6
Manufacturing	<del>68.5</del>	68.4	<del>68.6</del>	68.4	<del>69.3</del>	69.2

Industrial production posted a solid 0.9% increase in January, and manufacturing production rose 1.0%. Manufacturing has recently alternated between months of strong gains and very small declines, with the result being that manufacturing posted a 5% annualized gain in 4Q and is on track to meet or slightly exceed that rate of increase in the current quarter.

#### Producer price index (Feb 18)

%m/m sa, unless noted

•	Nov		Dec		Jan	
Finished goods	<del>-1.8</del>	1.5	-0.2	0.4	<del>_0.9</del>	1.4
%oya nsa	2.4		4.4		<del>4.5</del>	4.6
Core	0.5		0.0		<del>-0.2</del>	0.3
%oya nsa	1.2		0.9		<del>_0.8</del>	1.0
Energy	<del>-6.9</del>	5.6	<del>-0.4</del>	0.7	<del>_3.9</del>	5.1
Cars	<del>-2.0</del>	-0.7	-0.3	-0.2	<del>_0.5</del>	-0.5
Trucks	<del>-4.2</del>	3.5	<del>-1.2</del>	-0.9	<del>_0.5</del>	1.9
Core intermed.	0.3		0.5		<del>_1.0</del>	0.5
Core crude	<del>-0.8</del>	-1.0	<del>-5.0</del>	4.5		6.6

The headline PPI increased 1.4%m/m in January on higher energy prices and rose 4.6%oya. The core PPI increased 0.3%m/m (0.349%) and rose 1.0%oya. On a year-ago basis, core inflation remains soft, while over the last three months prices have grown at a relatively fast 3.3% annualized pace, the most since the last three months of 2008. The recent firmness in core producer price inflation should be watched closely, although there are some reasons to partially discount the jump in inflation over the last few months. First, more than half of a 0.5%m/m increase in the core PPI in November was explained by a jump in vehicle prices, a rebound after the introduction of new vehicle models had pushed prices down sharply in October. Second, there is a tendency

for core inflation in January to be unusually firm. Over the last 10 years, the core PPI has risen 0.1%-pt more in January than in the average of the two months on either side of January. The upward bias increases to 0.2%-pt when the last seven years are examined, a period during which this pattern has been especially noticeable.

#### Philadelphia Fed survey (Feb 18)

Diffusion indices, sa

Dec	Jan	Feb
22.5	15.2	<del>15.0</del> 17.6
8.3	3.2	22.7
14.9	11.0	19.7
-5.7	-1.6	3.2
36.6	33.2	32.4
1.4	2.7	3.7
52.6	52.5	55.1
	22.5 8.3 14.9 -5.7 36.6 1.4	22.5 15.2 8.3 3.2 14.9 11.0 -5.7 -1.6 36.6 33.2 1.4 2.7

The Philadelphia Fed survey shrugged off February snowstorms, showing strong improvement. The general business activity index increased to 17.6 from 15.2 and the ISMweighted composite rose to 55.1 from 52.5. The ISMweighted composite is at its highest level since March 2006.

#### CPI (Feb 19)

%m/m sa, unless noted

	Nov		Dec		Jan	
Total	<del>-0.4</del>	0.2	<del>-0.1</del>	0.2	<del>_0.3</del>	0.2
%oya nsa	1.8		2.7		<del>2.8</del>	2.6
Core	-0.03	0.04	<del>-0.11</del>	0.10	<del>_0.10</del>	-0.14
%oya nsa	1.7		1.8		<del>_1.7</del>	1.6
Core services	0.0		0.1			-0.2
Core goods	0.2		-0.2	0.1		0.1
Food	0.1		-0.2	0.1	<del>_0.3</del>	0.2
Energy	<del>-4.1</del>	2.2	-0.2	0.8	<del>2.7</del>	2.8
Housing	0.0		0.0			-0.3
Owners' eq. rent	<del>-0.12</del>	-0.09	<del>-0.02</del>	-0.01	<del>-0.05</del>	-0.08
Rent	<del>-0.07</del>	-0.06	<del>-0.01</del>	0.00	<del>-0.04</del>	0.04
Lodging away from home	-1.5		-0.5	0.1	<del>_0.5</del>	-2.1
Apparel	-0.3		0.4		<del>_0.2</del>	-0.1
New vehicles	<del>-0.6</del>	0.5	<del>-0.3</del>	-0.2	<del>-0.2</del>	-0.5
Used vehicles	<del>-2.0</del>	1.9	-2.5	2.2	1.5	
Airfares	<del>-3.8</del>	2.7	-2.4	2.2	<del>2.5</del>	-2.5
Communication	-0.3		0.1		<del>_0.1</del>	0.2
Medical care	0.3		0.1		<del>_0.2</del>	0.5

The consumer price index (CPI) increased 0.2% last month as energy prices rose 2.8%. More surprising was the 0.14% decline in the ex food and energy core CPI. This is an extremely weak number. The year-ago rate of core CPI is now 1.5% and the six- and three-month annualized rates of change are 0.9% and 0.0%. The policy implications are clear: core inflation is moving further below the Fed's implicit inflation target and in the process, real interest rates are moving higher. This is new news—unlike the well-telegraphed discount rate hike—and reinforces the case for a Fed on hold for an extended period. Recent declarations of "mission accomplished" in the fight against deflation risks now look somewhat premature.

# US focus: inflation is falling

- The January CPI report offered fresh evidence that inflation is set to trend down this year. Of particular importance was a 0.14%m/m decline in the core CPI. This was the first one-tenth decline since 1982. In fact, when we exclude a few declines in the early 1980s that were due to technical issues, we have not seen monthly core CPI changes this low since the early 1960s.
- In the year to January, the core CPI increased 1.6%, which is hardly different than the 1.7% rise over the prior 12-month period. However, over the last six months, the core CPI has only risen at a 0.8% annualized pace, the slowest pace since 1965. The question now is whether this slower pace of inflation will be maintained. We saw a similar deceleration last year, with core inflation rising just 1.0% annualized in the six months to January 2009. A surge in core goods inflation then led to a rebound.
- The fall in the core CPI in January was concentrated in core services, which declined 0.2%m/m, the first drop since 1982. Housing away from home (-2.1%) and airfares (-2.5%) were each particularly soft, and owners' equivalent rent declined 0.1%. One interesting development was that monthly changes in rental prices firmed in each of the last three months, possibly signaling the end to a brief period of deflation in this category, although the weak housing market should keep rental inflation in check.
- Core goods inflation has moderated some after surging in 1H09. Core goods prices rose 1.8% annualized over the last six months, down from 4.1% in the prior six months. The fact that the core consumer goods PPI is rising more slowly than the core goods CPI could help slow core CPI inflation further. The core goods CPI rose 2.9%oya, compared to a 1.7% rise in the core consumer PPI.

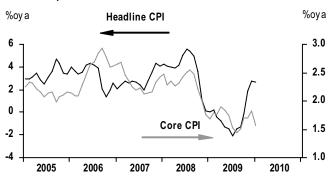
Core CPI	
%m/m, sa	
1.5 7	
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-0.5 <del>                                     </del>	82 87 92 97 02 07

Consumer	prices

	%oya			%ch d	%ch over 6m, saar		
	Jan 08	Jan 09	Jan 10	Jan 09	Jul 09	Jan 10	
CPI	4.3	0.0	2.6	-6.4	2.7	2.6	
Core <sup>1</sup>	2.5	1.7	1.6	1.0	2.1	8.0	
Core ex shelter	2.0	1.6	2.8	0.7	3.4	2.3	
Core goods	0.2	-0.5	2.9	-1.3	4.1	1.8	
Core services	3.4	2.5	1.0	1.9	1.4	0.5	
Food and beverages	4.8	5.2	-0.2	3.5	-1.4	0.9	
Housing	3.0	2.2	-0.5	-0.6	-0.7	-0.5	
Rent	3.9	3.4	0.5	3.4	1.2	-0.3	
Owners' equivalent rent	2.8	2.2	0.4	2.2	1.2	-0.4	
Apparel	-0.2	-0.9	1.7	-1.4	3.6	-0.1	
Transportation	9.4	-12.6	14.3	-35.0	14.6	14.9	
New and used vehicles	0.0	-3.2	5.3	-4.8	4.5	6.4	
New	-0.6	-2.6	4.1	-4.7	7.4	0.9	
Used	1.4	-9.0	11.5	-13.0	-2.6	27.5	
Medical care	4.9	2.6	3.5	3.3	3.2	3.7	
Recreation	1.0	1.6	-0.4	1.4	0.9	-1.8	
Education	5.9	5.5	4.6	5.7	5.4	3.9	
Communication	0.7	1.8	0.1	0.2	0.3	-0.2	
Tobacco	5.4	6.1	29.5	3.6	57.8	6.4	
Personal care	2.4	2.5	1.3	1.6	1.5	1.2	
Core PCE deflator <sup>2</sup>	2.4	1.7	1.2	1.0	1.7	8.0	
Cleveland Fed median CPI	3.2	2.7	1.0	2.4	1.2	0.8	

- Core is ex food and energy.
- 2. January 2009 value is a forecast based on January CPI.

#### Consumer prices



#### Core goods and services inflation

