



国际经济学

汇率与外汇市场

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提纲

1 Motivation

2 Exchange Rate

3 Foreign Exchange Market

- Parties involved in 外汇市场
- Transaction in 外汇市场



1 Motivation

2 Exchange Rate

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Fixed Exchange Rate

离岸人民币 (USDCNH)

6.9702 -0.0002 (0.00%)

交易中, 2018-10-31 09:34:53 (北京时间)

+加自选

概览

图表





人民币何时破七

华尔街见闻 10 月 31 日财经资讯

离岸人民币收复 6.97 关口中间价续创 2008 年以来新低

10 月 31 日周三早盘，离岸人民币兑美元快速反弹逾 90 点，收复 6.97 关口，报 6.9695。此前中国央行宣布下周在港发行央票。

在岸人民币兑美元开盘报 6.9639；人民币中间价连续第二日下调，两日累计下调 269 点，报 6.9646，为 2008 年以来最低。上一交易日中间价 6.9574；上一交易日官方收盘价报 6.9613，上一交易日夜盘收盘报 6.9675。此前一天，受 G20 峰会相关负面消息、人民币中间价下调影响，在岸人民币一度跌至 6.9717，创逾 10 年来最低。

年初迄今，美元指数节节高升，现已升破 97，创下 2017 年 6 月来新高。

从今年 6 月中旬至今，人民币兑美元汇率一直呈现贬值走势，四个月累计贬值超过 8%。

- 何为人民币中间价？何为开盘，何为收盘？何为离岸人民币？人民币的标准代码应该是 CNY 还是 CNH？
- 人民币中间价从 6.9639 变为 6.9646，明明是变大了，为何称为“下调”
- 269 点是个什么意思？有必要搞这么精确吗？
- 7 这个数字是人民币的幸运数字吗？

最近一个月来，人民币为何持续贬值？如果你是央行主席，是否应该出手干预？如何干预？



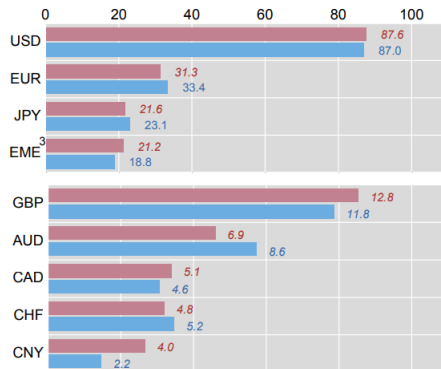
Turnover by currencies and currency pairs

Foreign exchange market turnover by currency and currency pairs

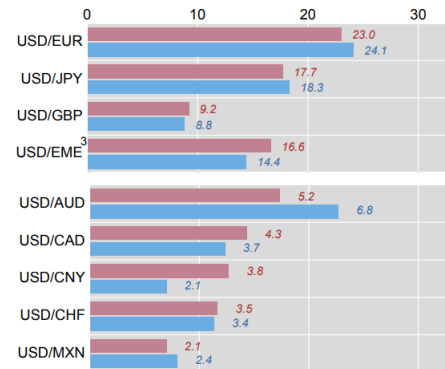
Net-net basis,¹ daily averages in April, in per cent

Graph 1

Selected currencies²



Selected currency pairs



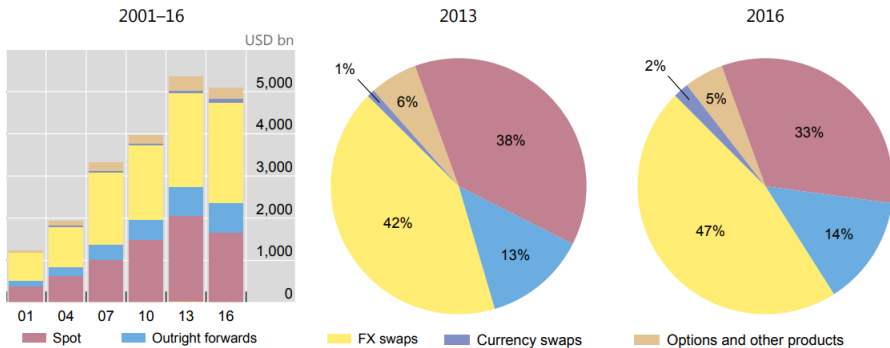


Turnover by instrument and maturity

Foreign exchange market turnover by instrument

Net-net basis,¹ daily averages in April

Graph 2



¹ Adjusted for local and cross-border inter-dealer double-counting.

Source: BIS Triennial Central Bank Survey. For additional data by instrument, see Table 1 on page 9.

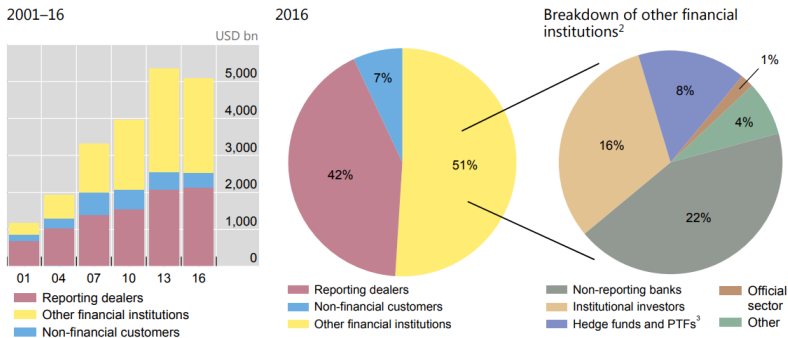


Turnover by counterparty

Foreign exchange market turnover by counterparty

Net-net basis,¹ daily averages in April

Graph 3



¹ Adjusted for local and cross-border inter-dealer double-counting. ² For definitions of counterparties, see page 18. ³ Proprietary trading firms.

Source: BIS Triennial Central Bank Survey. For additional data by counterparty, see Tables 4 and 5 on pages 12 and 13.

Chapter 14: Exchange Rates and the Foreign Exchange Market: An Asset Approach



1 Motivation

2 Exchange Rate

3 Foreign Exchange Market



Exchange Rates

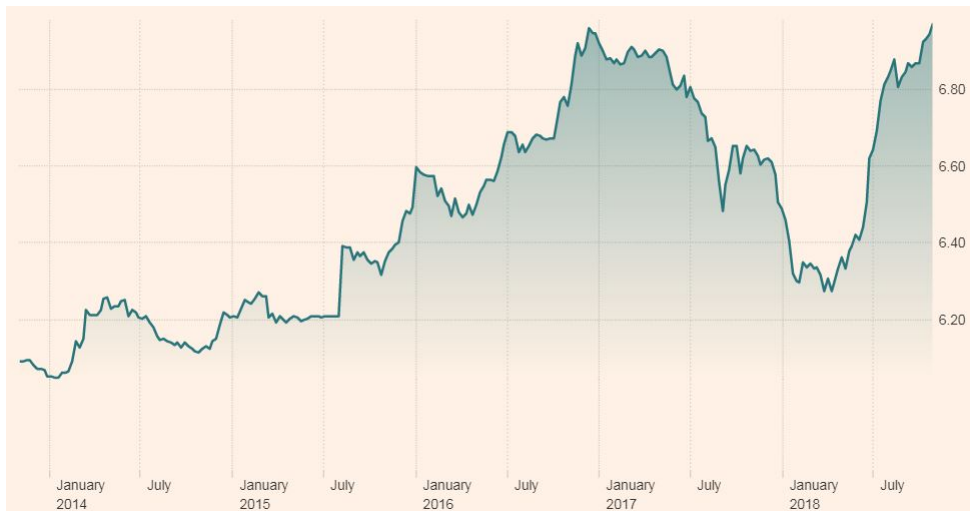
- Definition: **exchange rate** is simply the price of one currency in terms of another, and there are two methods of expressing it:
 - 1 *Direct*: The price of the foreign currency in terms of CNY (e.g., 6.97 CNY per USD): $E_{CNY/USD}$
 - 2 *Indirect*: The price of CNY in terms of the foreign currency (e.g., 0.1434 US dollar per 1 CNY)

Exchange rate regimes:

- *flexible*: Exchange rate is determined freely by the market
- *fixed*: Exchange rate is politically determined and market is manipulated

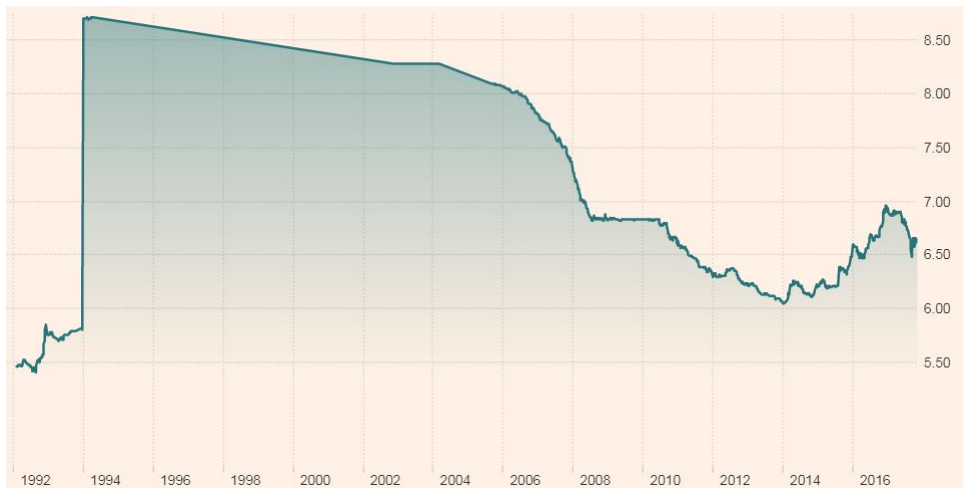


the Recent Summary of RMB





the Long-run Tendency of RMB





Exchange Rate Quotations

Dec 7 2012								2013 Jun 7							
Jun 7	Currency	DOLLAR		EURO		POUND		Currency	DOLLAR		EURO		POUND		Jun 7
		Closing Mid	Day's Change	Closing Mid	Day's Change	Closing Mid	Day's Change		Closing Mid	Day's Change	Closing Mid	Day's Change	Closing Mid	Day's Change	
Argentina	(Peso)	5.3015	0.0077	7.0089	0.0240	8.2378	0.0198	Poland	(Zloty)	3.2025	-0.0648	4.2338	-0.0771	4.9761	-0.0959
Australia	(A\$)	1.0545	0.0050	1.3941	0.0093	1.6385	0.0092	Romania	(New Leu)	3.4133	-0.0294	4.5125	-0.0300	5.3037	-0.0408
Bahrain	(Dinar)	0.3770	-	0.4985	0.0010	0.5858	0.0006	Russia	(Rouble)	32.2100	-0.0300	42.5833	0.0442	50.0495	0.0001
Bolivia	(Boliviano)	6.9100	-	9.1354	0.0179	10.7371	0.0100	Saudi Arabia	(SR)	3.7503	-0.0001	4.9581	0.0097	5.8274	0.0053
Brazil	(R\$)	2.1309	0.0027	2.8172	0.0090	3.3111	0.0072	Singapore	(S\$)	1.2453	-0.0014	1.6464	0.0015	1.9350	-0.0003
Canada	(C\$)	1.0208	-0.0110	1.3495	-0.0119	1.5861	-0.0156	South Africa	(R)	9.9518	-0.0399	13.1568	-0.0268	15.4636	-0.0476
Chile	(Peso)	500.500	-5.0500	661.686	-5.3619	777.702	-7.1138	South Korea	(Won)	1117.08	1.2250	1476.83	4.5208	1735.77	3.5214
China	(Yuan)	6.1335	-0.0027	8.1088	0.0124	9.5306	0.0047	Sweden	(SKr)	6.5789	0.0018	8.6976	0.0195	10.2226	0.0123
Colombia	(Peso)	1897.17	-13.6300	2508.15	-13.0515	2947.92	-18.4083	Switzerland	(SFr)	0.9351	0.0002	1.2362	0.0027	1.4530	0.0017
Costa Rica	(Colon)	498.980	-0.0300	659.677	1.2578	775.341	0.6772	Taiwan	(T\$)	29.7180	-0.0795	39.2887	-0.0276	46.1773	-0.0803
Czech Rep.	(Koruna)	19.3473	-0.1597	25.5780	-0.1605	30.0627	-0.2200	Thailand	(Baht)	30.6300	0.0300	40.4944	0.1192	47.5944	0.0909
Denmark	(DKr)	5.6394	-0.0115	7.4555	-0.0006	8.7627	-0.0098	Tunisia	(Dinar)	1.6248	-0.0049	2.1481	-0.0023	2.5247	-0.0052
Egypt	(Egypt £)	6.9890	-	9.2398	0.0182	10.8598	0.0102	Turkey	(Lira)	1.8774	-0.0188	2.4820	-0.0199	2.9171	-0.0265
Hong Kong	(HK\$)	7.7626	-	10.2625	0.0202	12.0619	0.0113	UAE	(Dirham)	3.6729	0.0000	4.8558	0.0095	5.7072	0.0052
Hungary	(Forint)	223.101	-3.1794	294.950	-3.6150	346.665	-4.6122	UK (0.6436)*	(£)	1.5539	0.0014	0.8509	0.0010	-	-
India	(Rs)	57.0750	0.1850	75.4560	0.3925	88.6860	0.3699	One Month		1.5535	-	0.8512	-	-	-
Indonesia	(Rupiah)	9805.00	12.5000	12962.7	41.9865	15235.5	33.6230	Three Month		1.5529	0.0000	0.8518	0.0000	-	-
Iran	(Rial)	12278.5	-	16232.8	31.9241	19078.9	17.8038	One Year		1.5510	-0.0003	0.8544	0.0000	-	-
Israel	(Shk)	3.6120	-0.0023	4.7753	0.0064	5.6125	0.0017	Ukraine	(Hryvnia)	8.1375	-0.0150	10.7582	0.0014	12.6445	-0.0115
Japan	(Y)	97.3850	-0.9900	128.748	-1.0530	151.322	-1.3957	Uruguay	(Peso)	20.8250	0.4500	27.5317	0.6479	32.3590	0.7287
One Month		97.3715	-0.0010	128.750	-0.0008	151.270	-0.0014	USA	(S)	-	-	1.3221	0.0026	1.5539	0.0014
Three Month		97.3382	-0.0021	128.751	-0.0037	151.160	-0.0013	One Month		-	-	1.3223	-	1.5535	-
One Year		97.0400	-0.0110	128.584	-0.0522	150.509	-0.0441	Three Month		-	-	1.3227	-	1.5529	0.0000
Kenya	(Shilling)	84.9000	-	112.242	0.2208	131.922	0.1231	One Year		-	-	1.3251	-0.0003	1.5510	-0.0003
Kuwait	(Dinar)	0.2847	-0.0003	0.3764	0.0004	0.4424	-	Venezuela (Bolivar Fuerte)		6.2921	-	8.3185	0.0164	9.7770	0.0091
Malaysia	(M\$)	3.0935	0.0105	4.0898	0.0219	4.8068	0.0207	Vietnam	(Dong)	21018.0	5.0000	27786.8	61.2433	32658.8	38.2380
Mexico	(New Peso)	12.7217	-0.1774	16.8187	-0.2009	19.7676	-0.2569								
New Zealand	(NZ\$)	1.2652	0.0106	1.6726	0.0173	1.9659	0.0183	Euro (0.7564)*	(Euro)	1.3221	0.0026	-	-	1.1754	-0.0012
Nigeria	(Naira)	159.700	0.8000	211.131	1.4708	248.150	1.4735	One Month		1.3223	-	-	-	1.1749	0.0000
Norway	(Nkr)	5.7702	-0.0076	7.6285	0.0050	8.9660	-0.0035	Three Month		1.3227	-	-	-	1.1741	0.0000
Pakistan	(Rupee)	98.4750	0.0100	130.189	0.2693	153.015	0.1583	One Year		1.3251	-0.0003	-	-	1.1705	0.0001
Peru	(New Sol)	2.7280	-0.0060	3.6066	-0.0008	4.2389	-0.0054	SDR		0.6597	-0.0011	0.8721	0.0002	1.0250	-0.0007
Philippines	(Peso)	42.2400	0.1000	55.8434	0.2418	65.6347	0.2165								

Rates are derived from WM/Reuters at 4pm (London time). * The closing mid-point rates for the Euro and £ against the \$ are shown in brackets. The other figures in the dollar column of both the Euro and Sterling rows are in the reciprocal form in line with market convention. Currency redenominated by 1000. Some values are rounded by the F.T. The exchange rates printed in this table are also available on <http://www.ft.com>



Depreciation and Appreciation

If we are under **flexible exchange rates**:

- 1 **Depreciation** $E_{CNY/USD} \uparrow$ the US dollar becomes more expensive, i.e., RMB becomes less valuable.
- 2 **Appreciation** $E_{CNY/USD} \downarrow$ the US dollar becomes less expensive, i.e., RMB becomes more valuable.



Devaluation and Revaluation

If we are under **fixed exchange rates**:

- 1 **Devaluation** $E_{CNY/USD} \uparrow$ the Euro becomes more expensive, i.e., CNY becomes less valuable.
- 2 **Revaluation** $E_{CNY/USD} \downarrow$ the Euro becomes less expensive, i.e., CNY becomes more valuable.



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Outline

1 Motivation

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- Parties involved in 外汇市场
- Transaction in 外汇市场



The Foreign Exchange Market

Main actor:

- **Commercial banks and other depository institutions**
 - Suppose I want to buy some books from Amazon US
 - ABC charges me in CNY, and then pays Amazon in USD
- Interbank trading is lions share of foreign currency trading
- *Wholesale* rates in the Financial Times: only trades of high amount
- *Retail* rates available to you and I are much worse



The Foreign Exchange Market

Other actors:

- 1 **Non-financial businesses** directly buy foreign currency transactions to pay foreign employees or suppliers
- 2 **Non-bank financial institutions** may trade foreign currency for investment clients
- 3 **Central banks** conduct official international reserves trades (small)



Characteristics of the Foreign Exchange Market

- Incredible volume
 - 4 trillion USD traded a day
 - The value of everything produced in the world in a year – 70 trillion dollars
- Tightly connected market
 - Price cannot be different in different places
 - No *arbitrage*
 - That is, can't buy in London, sell in Copenhagen for a profit



THE FOREIGN EXCHANGE MARKET

- One of the most fascinating things about the foreign exchange market is the huge sums of money that are exchanged on a daily basis.

	April 1995	April 1998	April 2001	April 2004	April 2007	April 2010
United Kingdom	479	685	542	835	1,483	1,854
United States	266	383	273	499	745	904
Japan	168	146	153	207	250	312
Singapore	107	145	104	134	242	266
Switzerland	88	92	76	85	254	263
Hong Kong	91	80	68	106	181	237
France	62	77	50	67	127	152
Germany	79	100	92	120	101	109
Other	292	391	333	555	898	959
Total	1,632	2,099	1,691	2,608	4,281	5,056

Geographic composition of Foreign exchange market turnover

Geographic composition (% share)						
United Kingdom	29.3	32.6	32.0	32.0	34.6	36.7
United States	16.3	18.3	16.1	19.1	17.4	17.9
Japan	10.3	7.0	9.0	8.0	5.8	6.2
Singapore	6.6	6.9	6.1	5.1	5.6	5.3
Switzerland	5.4	4.4	4.5	3.3	5.9	5.2
Hong Kong	5.6	3.8	4.0	4.1	4.2	4.7
France	3.8	3.7	2.9	2.6	3.0	3.0
Germany	4.8	4.7	5.4	4.6	2.4	2.1
Other	17.9	18.6	20.0	21.1	21.1	18.9
Total	100	100	100	100	100	100

- The main centre for foreign exchange trading is London, with some \$1,854 billion worth of foreign exchange traded on a daily basis, quite a lot when one considers that the annual gross domestic product of the United Kingdom only around 50% more than that.
- Other important foreign exchange centres are New York with \$904 billion, Tokyo with \$312 billion, Singapore \$266 billion, Paris \$152 billion and Frankfurt \$109 billion.



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Ways to trading currency

- **Spot rate:** exchange rates for currency exchange "on the spot", or when trading is executed immediately.
- **Forward rate:** promise to buy or sell in the future. most commonly for one month (30 days), three months (90 days), six months (180 days), nine months (270 days) and one year (360 days).

Other methods:

- 1 **Foreign exchange swap** sell currency on the spot and promise to buy it back in the future
- 2 **Futures contract** Promise to deliver currency in the future
- 3 **Options contracts** Option to buy or sell currency for a fixed rate in the future



Fig. 14-1: Dollar/Pound Spot and 90 Day Forward Exchange Rates, 1983-2013

- Why are they so close? It would be explained in CIP theory

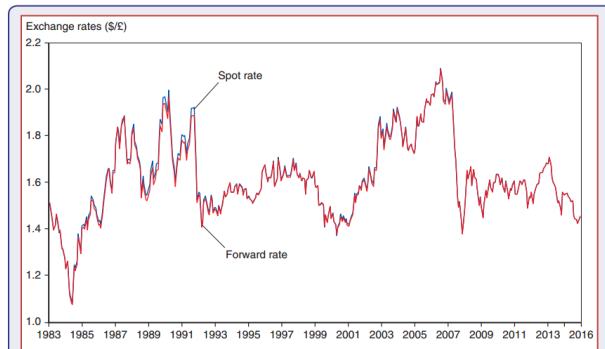


FIGURE 14-1

Dollar/Pound Spot and Forward Exchange Rates, 1983–2016

Spot and forward exchange rates tend to move in a highly correlated fashion.

Pearson MyLab Economics Real-time data



Other Types Exchange Rate I

■ Nominal exchange rate

- The exchange rate that prevails at a given date is known as the nominal exchange rate

■ Real exchange rate

- The real exchange rate is the nominal exchange rate adjusted for relative prices between the countries under consideration.
- It is normally expressed in index form algebraically as:

$$S_r = S \frac{P}{P^*}$$

- where S_r is the index of the real exchange rate, S is the nominal exchange rate (*foreign currency units per unit of domestic currency*) in index form, P is the index of the domestic price level and P^* is the index of the foreign price level.

■ Effective exchange rate



Other Types Exchange Rate II

- a measure of whether or not the currency is appreciating or depreciating against **a weighted basket** of foreign currencies.
- Real effective exchange rate index
 - While the nominal effective exchange rate is easy to compile on a daily basis and normally provides a reasonable measure of changes in a country's competitive position for periods of several months
 - it does not take account of the effect of price movements.



Takeaways

- We have seen who trades currency
- We have seen how currency is traded
- Then we care about how exchange rate is set?