

UWTSD MBA HKBM7009
(UWMBA-30013-2023-1-SS)

Global Business Challenges (5-2)

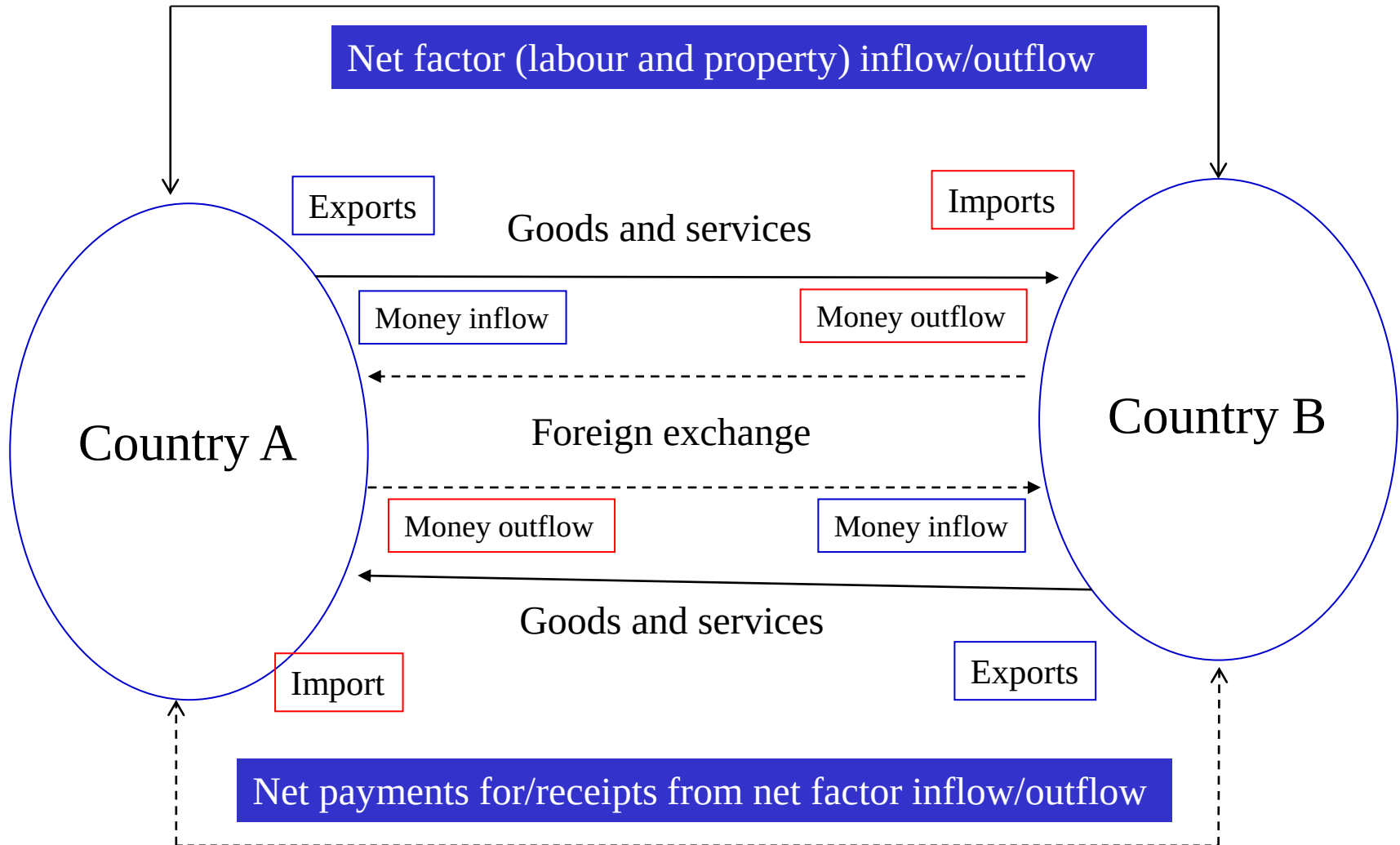
Global Financial Market

Che Cheong POON
4 February 2024; Sunday 3:30pm to 6:00pm

Lecture Agenda :

- Some Basics
- Balance-of-Payments Accounting
- Equity markets
- Markets for Interest Rate Instruments
- The Foreign Exchange Market

Some Basics



————→ Physical flow (The scope of international trade)

- - - - -> Money flow (The scope of international finance)

Dimensions of a global economy

- Global trade
 - a. in goods
 - b. in services
- Global money (The international settlement money and the BIS)
Where does money come from? Who decides what is money? And what happens when what is money changes?
- Global labour
- Global foreign direct investment
 - a. Plant, equipment, or operations
 - b. Financing or purchase in the form of loans, equity shares, or bonds
- Global flows of capital
 - a. Currency exchange
 - b. Settlements of purchases
 - c. Require international financial institutions to manage

Global Financial Integration

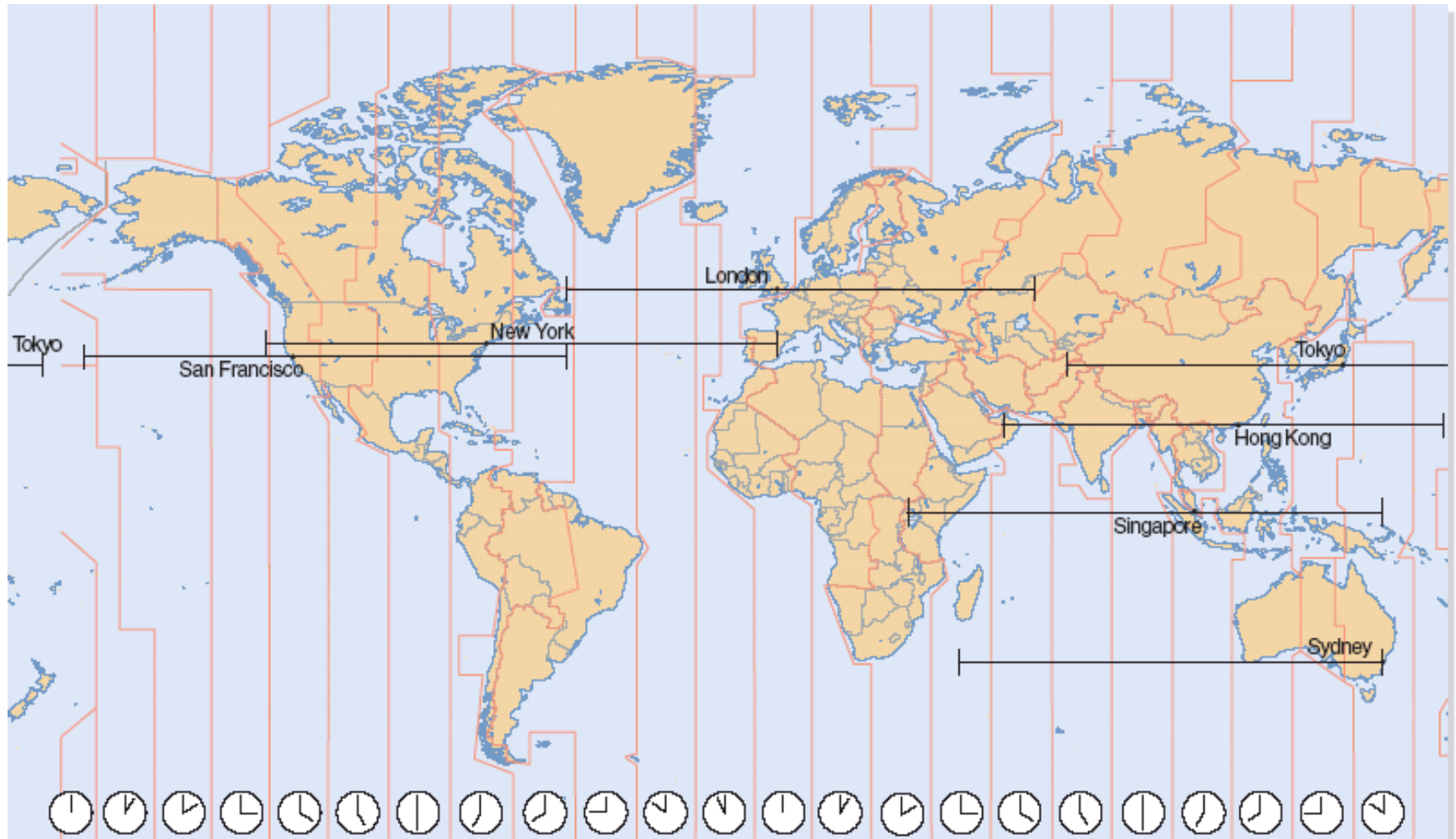
- The world has become increasingly integrated
 - Implying that there is more interdependence
- Problems in one part of the global economic system have ramifications for the entire system
 - Implying that there is more need for global collective action
 - There is greater need for institutions, like the IMF, to regulate the global international financial markets

Classification of Global Financial Market

1. Equity markets;
2. Markets for interest rate instruments;
3. Markets for investment and money market funds' shares/units
4. Foreign exchange markets; and
5. Financial derivatives markets
 - The most relevant types of derivatives are swaps, options, futures, outright forwards and forward rate agreements.

Since foreign exchange risk and interest rate risk are highly concerned by firms involved in global business, we will focus our discuss on items 1, 2, and 4.

24 Hour Trading



Balance-of-Payments Accounting

IMF Data Mapper

<https://www.imf.org/external/index.htm>

IMF data

<https://www.imf.org/en/Data> <World Economic Outlook Databases (WEO) updated>

<https://www.imf.org/en/Data#global>

IMF Statistics Data

<http://data.imf.org/?sk=388DFA60-1D26-4ADE-B505-A05A558D9A42>

Definition

The Balance of Payments is a system statement of all movements of goods and services, financial assets, and reserve assets between one country and the rest of the world over a year and compiled on principles of double-entry bookkeeping.

In Balance-of-Payments Accounting:

A debit entry is any transaction which results in a money outflow or payment to a foreign country (e.g., Imports).

A credit entry is any transaction which results in a money inflow or receipt from a foreign country (e.g., Exports).

A hypothetical Balance-of-Payments

	Credit entry (+)	Debit entry (-)
Current account	Merchandise exports	Merchandise imports
	Export of services	Import of services
	Unilateral transfers from foreigners	Unilateral transfers to foreigners
Current and financial account	Sales of money market assets and financial market assets to foreigners	Purchases of money market assets and financial market assets from foreigners
settlement account	Official sales of gold and foreign currencies reserves	Official purchases of gold and foreign currencies reserves

Balance-of-payments equilibrium and disequilibrium

Two different types of international transactions

Autonomous transactions:

Current account
Short-term capital account
(Financial market assets)

Accommodating transactions:

Official settlement account
Short-term capital account
(Money market assets)

Balance-of-payments equilibrium is a state of balance between autonomous international payments and receipts over a given period (a several years over a full business cycle)

$$\boxed{\text{Autonomous receipts}} = \boxed{\text{Autonomous payments}}$$

$$F^s = F^d \rightarrow \text{Balance-of-payments equilibrium}$$

$$F^s > F^d \rightarrow \text{Balance-of-payments surplus}$$

Balance-of-payments
disequilibrium



$$F^s < F^d \rightarrow \text{Balance-of-payments deficit}$$

香港國際收支平衡
國際投資頭寸及對外債務統計
Balance of Payments
International Investment Position and
External Debt Statistics of Hong Kong

2022 年第 3 季
Third Quarter 2022



香港特別行政區 政府統計處
Census and Statistics Department
Hong Kong Special Administrative Region



Source:

https://www.censtatd.gov.hk/en/data/stat_report/product/B1040001/att/B10400012022QQ03B0100.pdf

Hong Kong Balance of Payments. 2014-2022Q3

HK\$ million

Standard component	2008	2009	2010	2011	2012	2013	2014
Current account⁽¹⁾	255,808	164,001	124,369	107,513	32,151	32,475	31,453
<i>Credit</i>	4,248,237	3,746,549	4,581,401	5,183,690	5,495,239	5,930,355	6,079,388
<i>Debit</i>	-3,992,429	-3,582,547	-4,457,033	-5,076,177	-5,463,088	-5,897,880	-6,047,936
Goods	194,753	103,008	25,564	-58,203	-146,729	-216,592	-250,931
<i>Credit</i>	2,758,181	2,454,394	3,021,492	3,406,765	3,632,957	3,926,059	3,986,769
<i>Debit</i>	-2,563,428	-2,351,386	-2,995,928	-3,464,968	-3,779,686	-4,142,651	-4,237,700
Services	-21,041	27,617	78,789	132,681	169,760	229,424	255,563
<i>Credit</i>	544,358	501,303	625,719	710,716	764,026	812,640	829,085
<i>Debit</i>	-565,399	-473,686	-546,930	-578,035	-594,266	-583,216	-573,522
Primary income	100,507	49,762	37,596	52,826	29,455	40,519	46,607
<i>Credit</i>	940,939	787,215	929,741	1,059,351	1,091,235	1,183,568	1,254,733
<i>Debit</i>	-840,432	-737,453	-892,145	-1,006,526	-1,061,779	-1,143,049	-1,208,126
Secondary income	-18,412	-16,386	-17,580	-19,791	-20,336	-20,876	-19,786
<i>Credit</i>	4,759	3,637	4,449	6,858	7,021	8,088	8,802
<i>Debit</i>	-23,170	-20,022	-22,030	-26,649	-27,357	-28,964	-28,588
Capital and financial account⁽¹⁾	-254,709	-144,532	-88,838	-113,242	-67,664	-86,308	-73,785
Capital account	-1,958	-3,021	-4,436	-2,021	-1,433	-1,609	-748
<i>Credit</i>	20	246	108	19	1	4	3
<i>Debit</i>	-1,978	-3,266	-4,544	-2,040	-1,434	-1,613	-750
Financial account	-252,750	-141,511	-84,402	-111,220	-66,231	-84,699	-73,037
Financial non-reserve assets⁽²⁾	-28,774	470,987	-25,287	-24,437	122,658	-26,810	66,052
Direct investment	77,371	-28,421	-122,026	1,868	-102,623	-50,250	-85,718
<i>Assets</i>	-444,623	-449,138	-764,596	-746,372	-683,484	-646,336	-1,092,502
<i>Liabilities</i>	521,993	420,717	642,570	748,240	580,861	596,086	1,006,784
Portfolio investment	-281,141	-310,083	-442,460	-10,979	-31,592	-386,077	-64,384
<i>Assets</i>	-189,278	-393,632	-626,584	-155,818	-310,949	-514,650	-276,143
<i>Liabilities</i>	-91,863	83,549	184,125	144,839	279,358	128,573	211,739
Financial derivatives	63,338	24,560	18,677	20,884	15,208	54,661	118,359
<i>Assets</i>	533,854	376,298	278,919	359,707	308,202	424,894	449,093
<i>Liabilities</i>	-470,517	-351,738	-260,242	-338,823	-292,994	-370,232	-330,734
Other investment	111,659	784,930	520,552	-36,210	241,665	354,856	97,795
<i>Assets</i>	401,102	643,839	-540,318	-780,960	-132,337	-639,171	-925,077
<i>Liabilities</i>	-289,443	141,072	1,060,870	744,749	374,001	994,027	1,022,872
Reserve assets⁽²⁾	-223,976	-612,498	-89,145	-86,783	-188,889	-87,890	-139,089
Net errors and omissions⁽²⁾	-1,099	-19,470	-35,530	5,729	35,513	53,833	42,332
Overall Balance of Payments	223,976	612,498	59,145	86,783	188,889	57,890	139,089

Standard component	2021 第2季 2nd Qtr	2021 第3季 3rd Qtr	2021 第4季 4th Qtr	2022 第1季 1st Qtr	2022 第2季 2nd Qtr	2022 第3季 3rd Qtr
Current account⁽¹⁾	78,036	91,037	86,747	79,029	30,039	115,839
Credit	1,877,138	1,972,118	2,011,293	1,743,970	1,872,380	1,882,639
Debit	-1,799,101	-1,881,081	-1,924,546	-1,664,941	-1,842,341	-1,766,800
Goods	-29,586	3,158	41,428	13,821	-79,650	13,165
Credit	1,238,532	1,365,691	1,470,806	1,218,829	1,213,428	1,234,602
Debit	-1,268,118	-1,362,533	-1,429,378	-1,205,008	-1,293,078	-1,221,437
Services	20,830	33,993	24,487	44,752	34,841	43,619
Credit	129,880	157,104	160,382	161,772	150,164	163,499
Debit	-109,050	-123,111	-135,895	-117,020	-115,323	-119,880
Primary income	91,920	58,781	25,215	23,246	78,015	62,848
Credit	505,090	445,523	376,095	358,182	503,856	480,225
Debit	-413,171	-386,742	-350,880	-334,936	-425,841	-417,378
Secondary income	-5,127	-4,895	-4,383	-2,790	-3,167	-3,792
Credit	3,635	3,800	4,011	5,187	4,932	4,312
Debit	-8,763	-8,695	-8,393	-7,977	-8,099	-8,105
Capital and financial account⁽¹⁾	-105,231	-61,581	-117,822	-49,515	-61,142	-148,430
Capital account	-10,133	-109	-130	-97	-196	-89
Credit	1	2	2	5	3	3
Debit	-10,134	-112	-131	-102	-199	-92
Financial account	-95,097	-61,472	-117,693	-49,418	-60,946	-148,341
Financial non-reserve assets ⁽²⁾	-132,653	-34,253	-124,714	-101,908	-220,753	-286,727
Direct investment	65,290	46,731	140,483	-101,564	62,304	25,043
Assets	-165,890	-127,537	-131,114	-376,024	-167,618	-150,901
Liabilities	231,180	174,269	271,597	274,461	229,922	175,944
Portfolio investment	-223,053	-244,153	-127,844	145,052	-177,904	-239,172
Assets	-231,853	-225,726	-150,054	86,079	-142,911	-240,791
Liabilities	8,800	-18,428	22,209	58,974	-34,994	1,619
Financial derivatives	17,648	5,042	26,270	16,086	14,113	56,206
Assets	132,198	105,255	119,016	120,799	186,789	291,243
Liabilities	-114,550	-100,213	-92,746	-104,713	-172,676	-235,036
Other investment	7,461	158,127	-163,622	-161,482	-119,265	-128,804
Assets	-333,522	-122,025	-98,939	-32,145	-99,322	-94,759
Liabilities	340,983	280,152	-64,683	-129,337	-19,943	-34,044
Reserve assets ⁽²⁾	37,556	-27,219	7,021	52,489	159,808	138,386
Net errors and omissions⁽³⁾	27,195	-29,455	31,075	-29,514	31,103	32,591
Overall Balance of Payments	-37,556	27,219	-7,021	-52,489	-159,808	-138,386

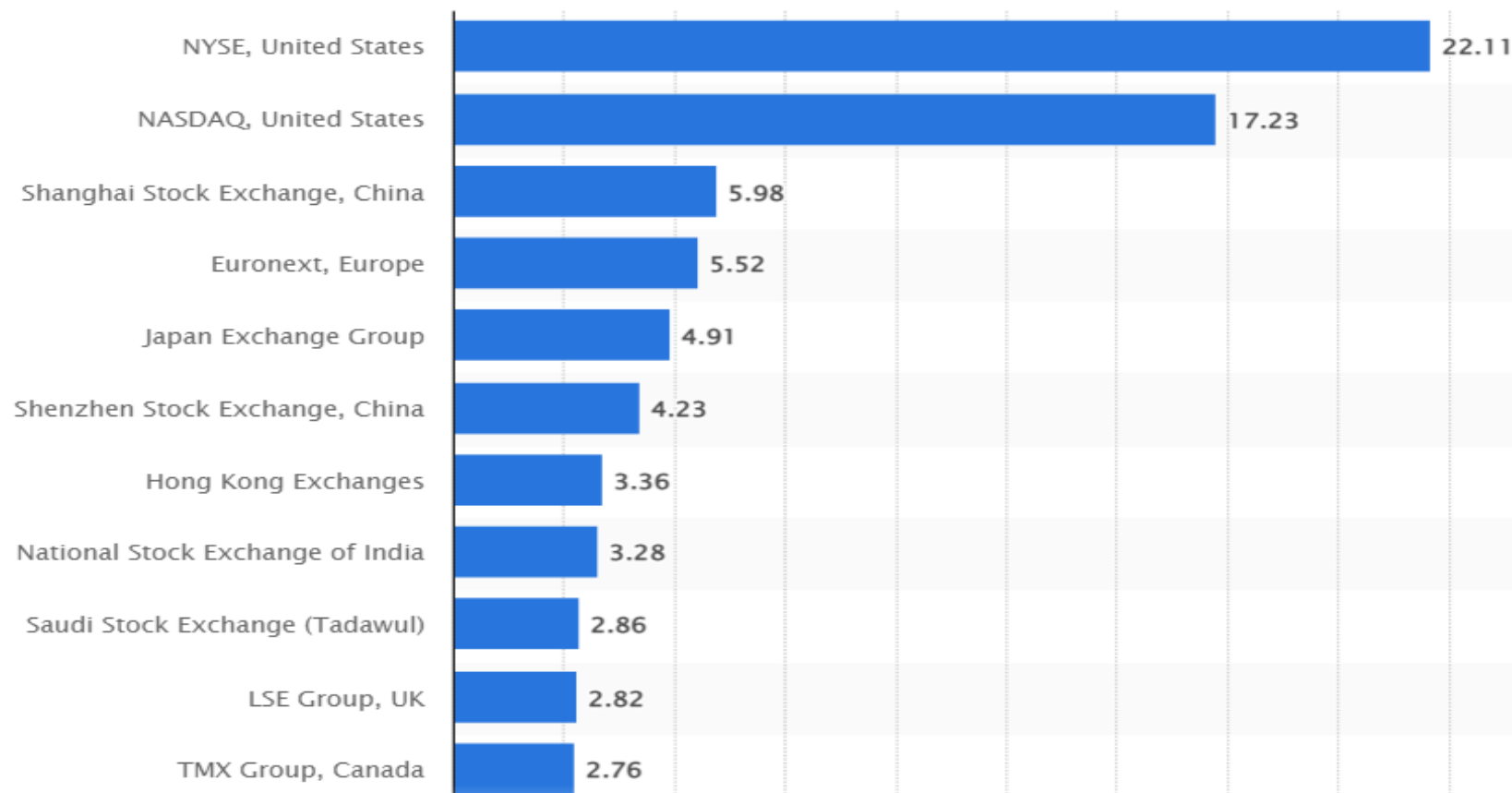
Equity markets

- **A stock exchange** is a marketplace where investors can buy and sell securities, including stocks, bonds, derivatives, commodities and other financial instruments.
- This is the most powerful component of the financial market.
- It serves as a measure of the economy's health and a key indicator of the world's economic strength.

Top 11 largest stock exchanges in the world

Stock Exchange	Year of Incorporation	Country
New York Stock Exchange (NYSE)	1792	USA
National Association of Securities Dealers Automated Quotations (NASDAQ)	1971	USA
Shanghai Stock Exchange (SSE)	1866 (1990)	China
European New Exchange Technology (EURONEXT)	2000	Europe
Hong Kong Stock Exchange (HKEX)	1891	Hong Kong
Tokyo Stock Exchange (TSE)	1898	Japan
Shenzhen Stock Exchange (SZSE)	1990	China
Bombay Stock Exchange (BSE)	1875	India
Saudi Stock Exchange (Tadawul)	2007	Saudi Arabia
London Stock Exchange (LSE)	1801	United Kingdom
Toronto Stock Exchange (TMX)	1861	Canada

Largest stock exchange operators worldwide as of October 2022, by market capitalization of listed companies(in trillion U.S. dollars)



New York Stock Exchange (NYSE)

- New York Stock Exchange (NYSE) is the world's largest stock exchange located at 11 Wall Street, New York City, USA. NYSE has a market capitalization of \$26.2 trillion and has more than 2400 companies listed. The companies listed include many blue-chip companies and are diversified across all sectors.
- NYSE is one of the oldest stock exchanges that was established in the year 1792. The average trading volume on this exchange is between 2 to 6 billion shares. Thus, it has the power to affect other stock market indices because of high trading volumes across multiple countries and nations worldwide.
- The most common indices present on NYSE are DJIA (index of 30 prominent stocks), S&P 500 (tracking 500 largest companies in the USA) and NASDAQ Composite Index (free float weighted market cap index comprising most common stocks of NYSE).

National Association of Securities Dealers Automated Quotations (NASDAQ), USA

- NASDAQ is the world's second-largest stock exchange, and the largest U.S. equity exchange by volume, located at 151 W, 42nd Street, New York City.
- It was the first electronically traded stock exchange in the world, established in 1971. NASDAQ has a total market cap of \$17.23 trillion and more than 3000 companies listed with daily trading volume of 1,746,154,94 on 28 January 2023.
- NASDAQ exchange includes big heavyweight technology companies which contribute 9% of the total market value in the world. However, it has no company listed from the oil, gas or utility sectors. It is more inclined towards the technology, health care and consumer services sector. Some big companies include Microsoft, Google, Facebook, Amazon, Tesla, Apple, etc.
- The common indices on the NASDAQ exchange are NASDAQ Composite Index, NASDAQ 100 and NASDAQ Non-Financial.

What is the relationship between stock prices and money supply?



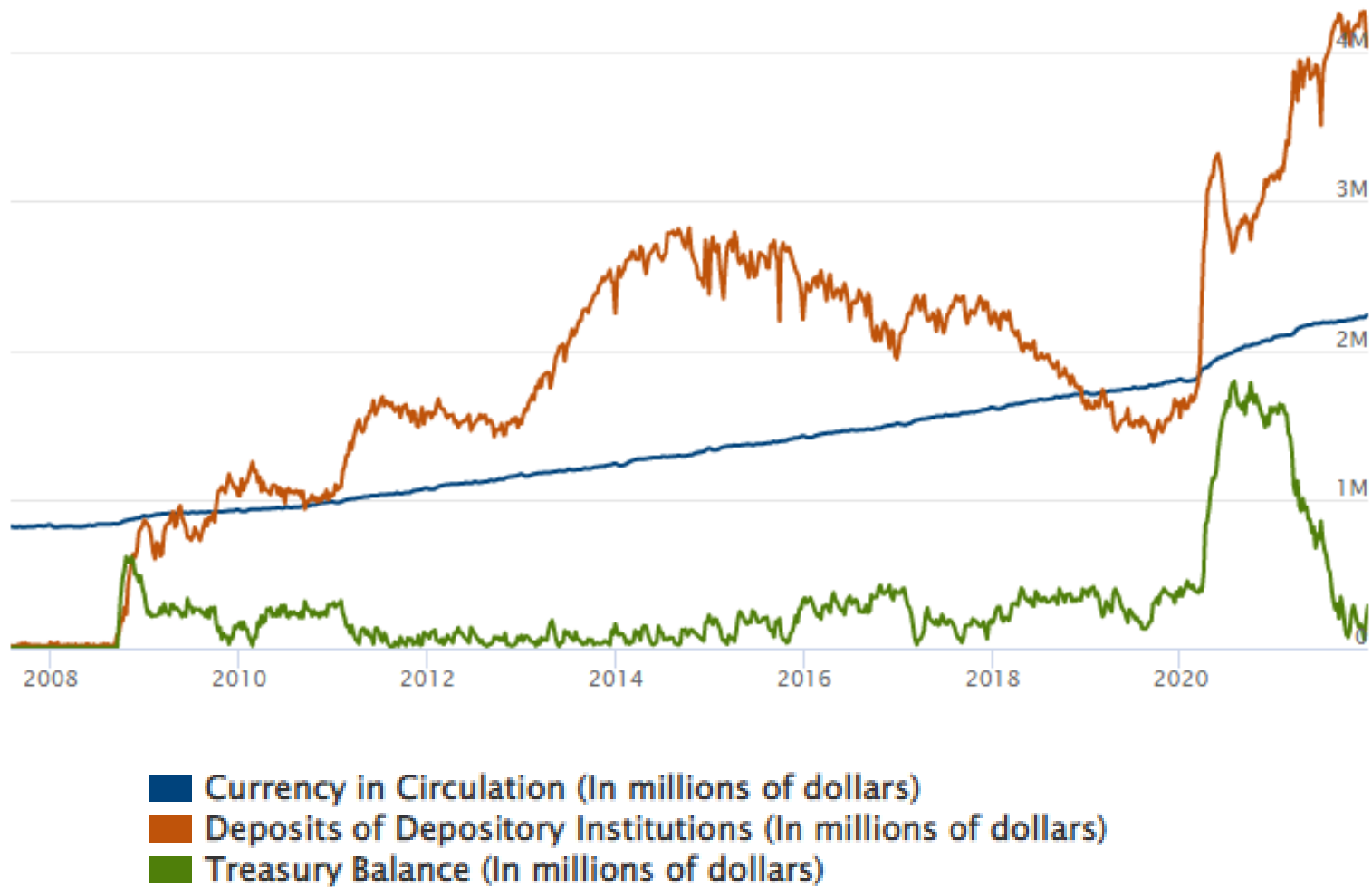
In the Monetarist approach of the transmission mechanism:

In security market, the prices are primarily determined by the demand and supply of securities. Excessive supply of money in an economy also increases the overall liquidity position of the economy and thus the spending power of investors on securities leads to higher demand and upward movement of security prices.

In the Keynesian approach of the transmission mechanism:

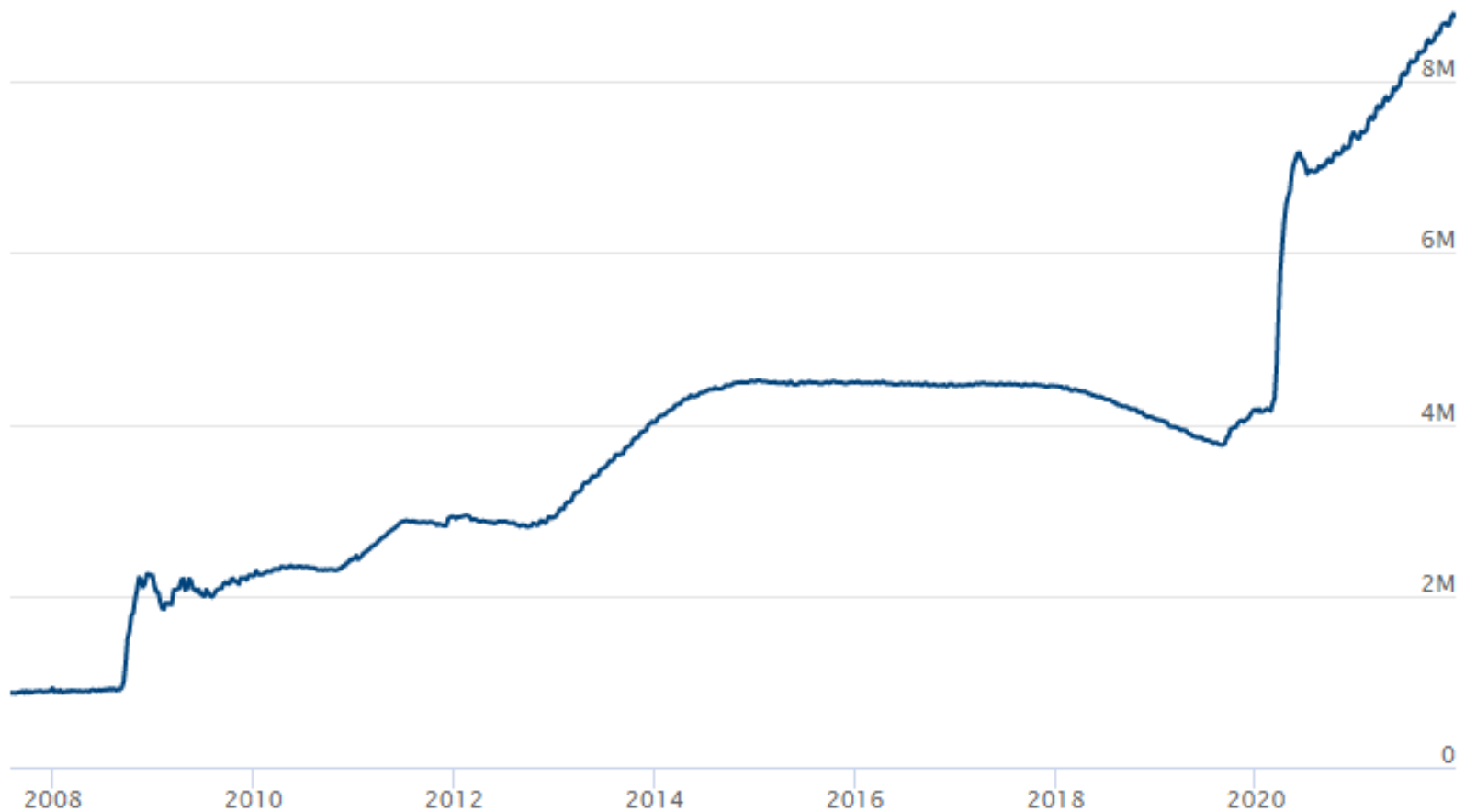
A higher money supply leads to lower interest rates, higher stock prices and lower stock returns. However, in the short run, higher money supply can also lead to inflation and interest rates, a lower stock price and higher returns. **And thus, we need to look at the level of real interest rates.**

US balance sheet trends: selected liabilities of the Federal Reserve (in millions of USD)



Source: https://www.federalreserve.gov/monetarypolicy/bst_recenttrends.htm

US balance sheet trends: total assets of the Federal Reserve (in millions of USD)



Source: https://www.federalreserve.gov/monetarypolicy/bst_recenttrends.htm

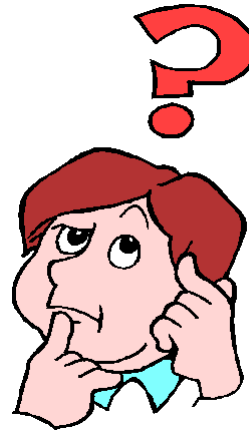
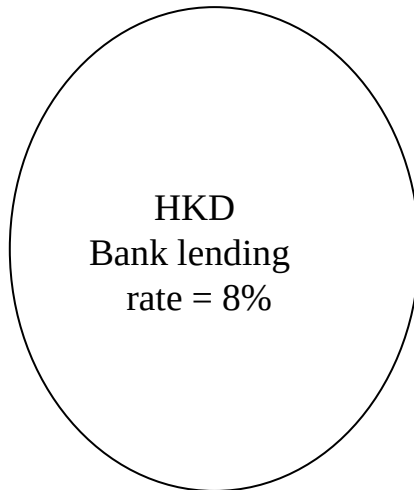


What will be the effect on global financial market after the Fed speeds up the pace of the tapering of asset purchases?

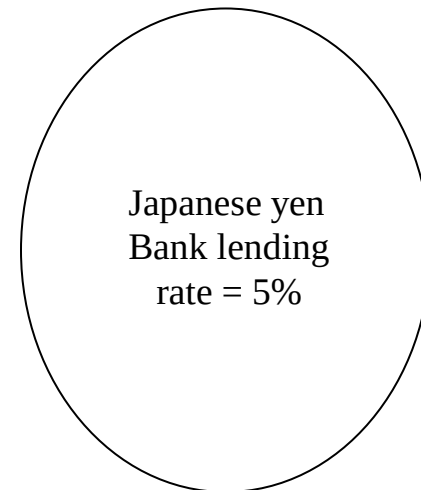
Markets for Interest Rate Instruments

Transformation of currency denomination in business loans

Hong Kong



Japan

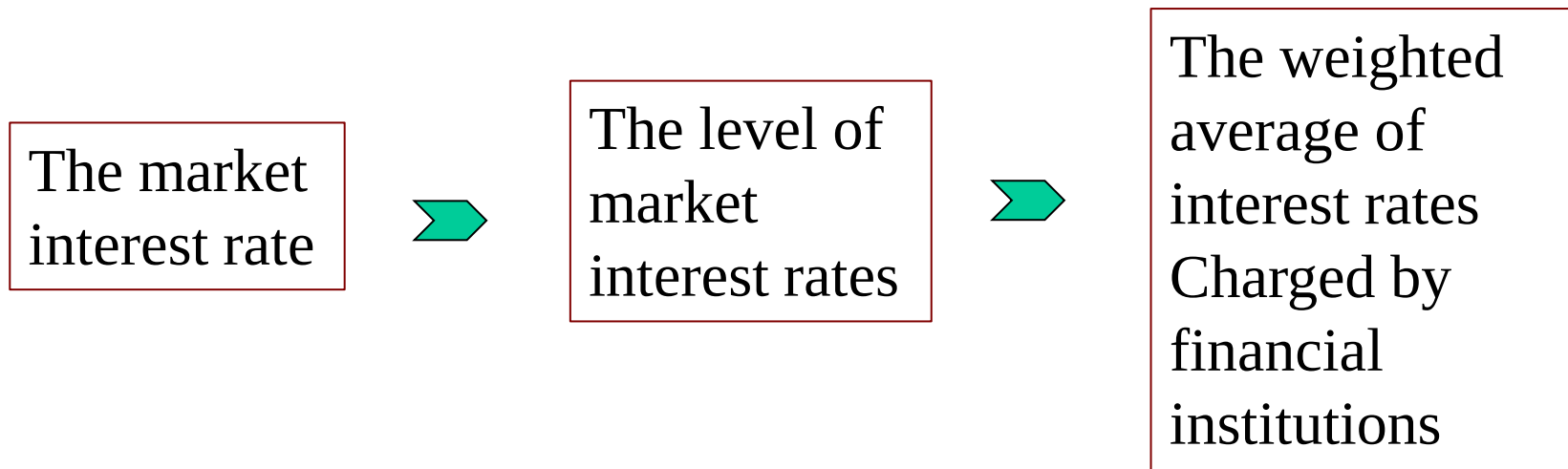


- The spread between buying and selling prices
- Service charge
- Transaction cost (service charge or commission)
- Exchange rate Expectations
- Exchange Risk
- Net profit margin

Interest Rate Instruments

Deposits and loans	Short term (up to and including 1 year) Interbank deposits and loans US Federal funds Bank time deposit or transferable deposits Bank business loans
	Long term (over 1 year) Bank mortgage loans Bank long term fixed deposits
Debt securities	Short term (up to and including 1 year) Examples: Treasury bills and commercial papers
	Long term (over 1 year) Examples: Bonds sold by issuing companies, governments and others outside their own countries

The market interest rate



There are different rate of interest applied to different individuals/firms subject to different terms to maturity, risk premium (credit risk, country risk, industry risk), and the monetary authority's interest rate target.

The Bank of International Settlement (BIS) Policy rates

- The data set on the monetary policy rates of 38 central banks.
- This is the only data set containing both current and historical data for a large number of countries.
- Central banks informed the BIS on which interest rates to be considered as policy
- The data set presents the target rate, or when this is not available the traded rate, for the central bank's main policy instrument. Several central banks implement their monetary policy based on more than one interest rate.

Sources: <https://www.bis.org/statistics/cbpol.htm>

BIS central bank policy rates for selected countries:2009 to 2023

Per Cent Per Year

Period	HK	China	Japan	USA	India	Philippines
31.12.2009	0.5	5.31	0.1	0.125	4.75	4
31.12.2010	0.5	5.81	0.05	0.125	6.25	4
31.12.2011	0.5	6.56	0.05	0.125	8.5	4.5
31.12.2012	0.5	6	0.05	0.125	8	3.5
31.12.2013	0.5	6	0	0.125	7.75	3.5
31.12.2014	0.5	5.6	0	0.125	8	4
31.12.2015	0.75	4.35	0	0.375	6.75	4
31.12.2016	1	4.35	-0.1	0.625	6.25	3
31.12.2017	1.75	4.35	-0.1	1.375	6	3
31.12.2018	2.75	4.35	-0.1	2.375	6.5	4.75
30.09.2019	2.25	4.35	-0.1	1.875	5.15	4
31.12.2020	0.5	3.85	-0.1	0.125	4	2
31.11.2021	0.5	3.85	-0.1	0.125	4	2
31.12.2022	4.75	3.65	-0.1	4.375	6.25	5.5
31.12.2023	5.75	3.45	-0.1	6.5	6.5	6.5

Source: Central bank policy rates (Monthly data)
<https://www.bis.org/statistics/cbpol.htm>

The Foreign Exchange Market

Bilateral Exchange Rates

Exchange rates are expressed as the price of one currency in terms of another.

Quoted currency = numerator
Base currency = denominator

(HKD/USD) = HKD needed to buy one U.S. dollar

HKD is quoted currency, dollar is base currency

$$\text{Direct quote} = \frac{\text{Quoted currency}}{\text{Base currency}} = \frac{7.8}{1} = 7.8$$

$$\text{Indirect quote} = \frac{1}{\text{Direct quote}} = \frac{1}{7.8} = 0.1282$$

香港統計月刊 Hong Kong Monthly Digest of Statistics

2024 年 1 月
January 2024



香港特別行政區 政府統計處
Census and Statistics Department
Hong Kong Special Administrative Region



2023 Privacy-Friendly Awards
Privacy-Friendly Awards
私隱之友嘉許獎
AWARDED TO 12/2023 Hong Kong
AWARDS FOR PRIVACY-FRIENDLY ORGANISATIONS



Source:

<https://www.censtatd.gov.hk/en/EIndexbySubject.html?scode=460&pcode=B1010002>

Exchange rates and the Effective Exchange Rate Indices 2021-2023

表 9.14 **外幣兌換率及港匯指數**
Table 9.14 **Exchange rates and the Effective Exchange Rate Indices**

(每單位外幣兌換港元) (HK Dollar per unit of foreign currency)												
年	月	澳元 Australian Dollar	加拿大元 Canadian Dollar	人民幣 Chinese Renminbi	歐元 Euro	印度盧比 Indian Rupee	印尼盾 Indonesian Rupiah	日圓 Japanese Yen	南韓圓 Korean Won	馬來西亞元 Malaysian Ringgit	新台幣 New Taiwan Dollar	菲律賓 披索 Philippine Peso
2021		5.84	6.20	1.2054	9.20	0.105	0.0005	0.0708	0.0068	1.88	0.273	0.160
2022		5.44	6.02	1.1634	8.24	0.100	0.0005	0.0599	0.0061	1.78	0.263	0.145
2023		5.20	5.80	1.1047	8.47	0.095	0.0005	0.0558	0.0060	1.72	0.257	0.145
2022	10	4.99	5.73	1.0899	7.72	0.095	0.0005	0.0533	0.0055	1.67	0.246	0.134
	11	5.17	5.83	1.0914	7.99	0.096	0.0005	0.0551	0.0058	1.70	0.250	0.138
	12	5.26	5.73	1.1157	8.24	0.094	0.0005	0.0577	0.0060	1.76	0.256	0.142
2023	1	5.43	5.82	1.1523	8.42	0.096	0.0005	0.0600	0.0063	1.81	0.259	0.145
	2	5.42	5.84	1.1459	8.40	0.095	0.0005	0.0590	0.0061	1.80	0.262	0.146
	3	5.25	5.74	1.1377	8.40	0.095	0.0005	0.0587	0.0060	1.76	0.260	0.146
	4	5.25	5.82	1.1387	8.61	0.096	0.0005	0.0587	0.0059	1.77	0.263	0.145
	5	5.21	5.80	1.1198	8.52	0.095	0.0005	0.0572	0.0059	1.74	0.263	0.145
	6	5.25	5.89	1.0926	8.48	0.095	0.0005	0.0554	0.0060	1.69	0.261	0.145
	7	5.26	5.91	1.0867	8.64	0.095	0.0005	0.0554	0.0061	1.70	0.258	0.147
	8	5.08	5.81	1.0772	8.54	0.094	0.0005	0.0541	0.0059	1.70	0.253	0.143
	9	5.03	5.78	1.0718	8.36	0.094	0.0005	0.0529	0.0059	1.67	0.252	0.142
	10	4.97	5.71	1.0694	8.26	0.094	0.0005	0.0523	0.0058	1.65	0.248	0.142
	11	5.07	5.69	1.0790	8.44	0.094	0.0005	0.0521	0.0060	1.66	0.250	0.144
	12	5.22	5.81	1.0924	8.52	0.094	0.0005	0.0542	0.0060	1.68	0.256	0.145

(每單位外幣兌換港元) --- 續 (HK Dollar per unit of foreign currency) --- cont'd									港匯指數 (2020年1月=100) Effective Exchange Rate Indices for HK Dollar (January 2020 = 100)		
年 Year	月 Month	英鎊 Pound Sterling	新加坡元 Singapore Dollar	南非蘭特 South African Rand	瑞士法郎 Swiss Franc	泰銖 Thai Baht	美元 U.S. Dollar	特別 提款權 Special Drawing Right	貿易總值 (進口及整體 出口)加權 Trade (import and export) - weighted	進口貨值 加權 Import- weighted	整體出口 貨值加權 Export- weighted
2021		10.69	5.78	0.53	8.51	0.244	7.774	11.07748	95.5	95.8	95.1
2022		9.67	5.68	0.48	8.20	0.224	7.832	10.48219	100.1	100.8	99.3
2023		9.73	5.83	0.42	8.72	0.225	7.829	10.44396	103.4	103.9	102.9
2022	10	8.86	5.51	0.43	7.89	0.207	7.851	10.05705	106.4	107.3	105.3
	11	9.19	5.65	0.45	8.12	0.216	7.831	10.18422	105.3	105.9	104.5
	12	9.48	5.76	0.45	8.35	0.224	7.788	10.34885	103.0	103.5	102.5
2023	1	9.55	5.90	0.46	8.46	0.236	7.820	10.51305	100.3	100.7	99.8
	2	9.48	5.89	0.44	8.48	0.231	7.848	10.50455	100.7	101.2	100.2
	3	9.53	5.86	0.43	8.48	0.228	7.850	10.49098	101.4	101.9	100.8
	4	9.77	5.89	0.43	8.74	0.229	7.851	10.59061	101.1	101.6	100.5
	5	9.78	5.85	0.41	8.74	0.230	7.837	10.51138	102.3	102.8	101.8
	6	9.88	5.82	0.42	8.69	0.225	7.833	10.44695	103.9	104.3	103.5
	7	10.06	5.86	0.43	8.95	0.226	7.818	10.51576	104.0	104.3	103.7
	8	9.94	5.79	0.42	8.91	0.224	7.826	10.43167	105.1	105.6	104.6
	9	9.69	5.74	0.41	8.71	0.218	7.829	10.32684	105.9	106.4	105.4
	10	9.52	5.72	0.41	8.66	0.215	7.826	10.26364 *	106.5	107.1	105.8
	11	9.69	5.79	0.42	8.75	0.221	7.807	10.33178	105.5	106.0	104.9
	12	9.88	5.86	0.42	9.02	0.224	7.810	10.41784	104.2	104.7	103.7

註釋：數字是指期內每日收市中間價的平均值。除印尼盾、新台幣及菲律賓披索的數字是現鈔價外，其餘的均為電匯價。

Note: Figures are the averages of the daily closing middle-market rates for the respective period. They are telegraphic transfer rates except those for the Indonesian Rupiah, New Taiwan Dollar and Philippine Peso which are notes rates.

Source: Hong Kong Monthly Digest of Statistics. January 2024, C&S. P193

Currency Weights of the New Series of Effective Exchange Rate Index

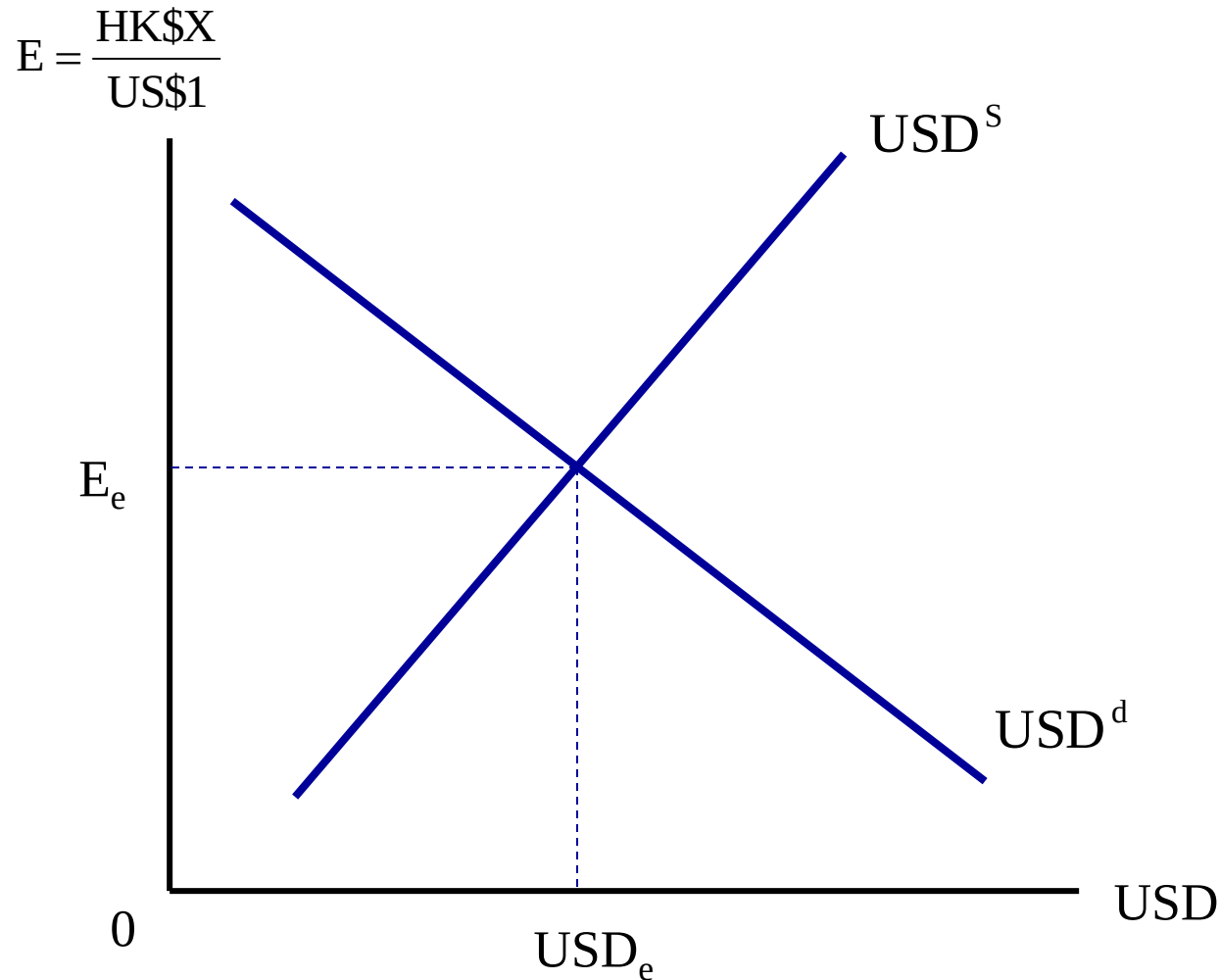
貨幣	Currency	(%)					
		貿易總值加權		進口貨值加權		整體出口貨值加權	
		Trade-weighted		Import-weighted		Export-weighted	
		重訂基期後 數列	舊數列	重訂基期後 數列	舊數列	重訂基期後 數列	舊數列
		Rebased series	Old series	Rebased series	Old series	Rebased series	Old series
人民幣	Chinese Renminbi	53.95	52.45	47.18	48.52	61.67	56.93
美元	U.S. Dollar	9.16	8.68	7.32	5.51	11.26	12.28
新台幣	New Taiwan Dollar	5.85	4.86	8.75	6.97	2.54	2.45
歐元	Euro	5.61	7.49	4.77	6.06	6.56	9.11
新加坡元	Singapore Dollar	4.66	4.67	7.18	7.16	1.78	1.86
日圓	Japanese Yen	4.56	7.22	5.81	9.43	3.13	4.71
南韓圓	Korean Won	3.64	3.09	5.54	4.11	1.48	1.93
馬來西亞元	Malaysian Ringgit	2.48	1.83	3.86	2.65	0.91	0.89
印度盧比	Indian Rupee	2.20	2.34	1.55	2.17	2.93	2.52
泰銖	Thai Baht	1.74	1.79	2.02	2.32	1.42	1.19
英鎊	Pound Sterling	1.45	1.82	1.55	1.30	1.33	2.40
菲律賓披索	Philippine Peso	1.29	0.97	1.65	1.26	0.88	0.65
瑞士法郎	Swiss Franc	1.07	1.18	1.38	1.63	0.72	0.68
澳門元	Macao Pataca	0.70	-	0.19	-	1.28	-
澳元	Australian Dollar	0.62	0.98	0.40	0.54	0.88	1.48
印尼盾	Indonesian Rupiah	0.45	-	0.36	-	0.56	-
加拿大元	Canadian Dollar	0.33	0.63	0.22	0.37	0.45	0.92
南非蘭特	South African Rand	0.23	-	0.24	-	0.21	-
總計	Total	100.00	100.00	100.00	100.00	100.00	100.00

The old and new Exchange Rate Index

- The effective exchange rate index ([EERI](#)) for the Hong Kong Dollar (HKD) is an index which measures movements in the weighted average of the exchange rate of the HKD against the currencies of major trading partners of Hong Kong. It serves as an indicator for measuring the overall strength of the HKD relative to selected currencies. A rebased series of EERI, which includes 18 currencies and is based on January 2020 as 100, has replaced the old series as from 3 January 2022.
- “Rebased Series of Effective Exchange Rate Index for the Hong Kong Dollar” ,Feature Articles FA1, in Hong Kong Monthly Digest of Statistics January 2022. Available at:
<https://www.censtatd.gov.hk/en/EIndexbySubject.html?pcode=B1010002&rcode=460>

A theoretical model for exchange rate determination

The US Foreign Exchange Market in Hong Kong



Supply of the foreign currency

- A foreign currency is offered in exchange for the domestic currency because holders of the foreign currency wish to make payments in the domestic currency.
- It is derived from the credit items in the BP.
- The supply of curve is slopping upwards from left to right.

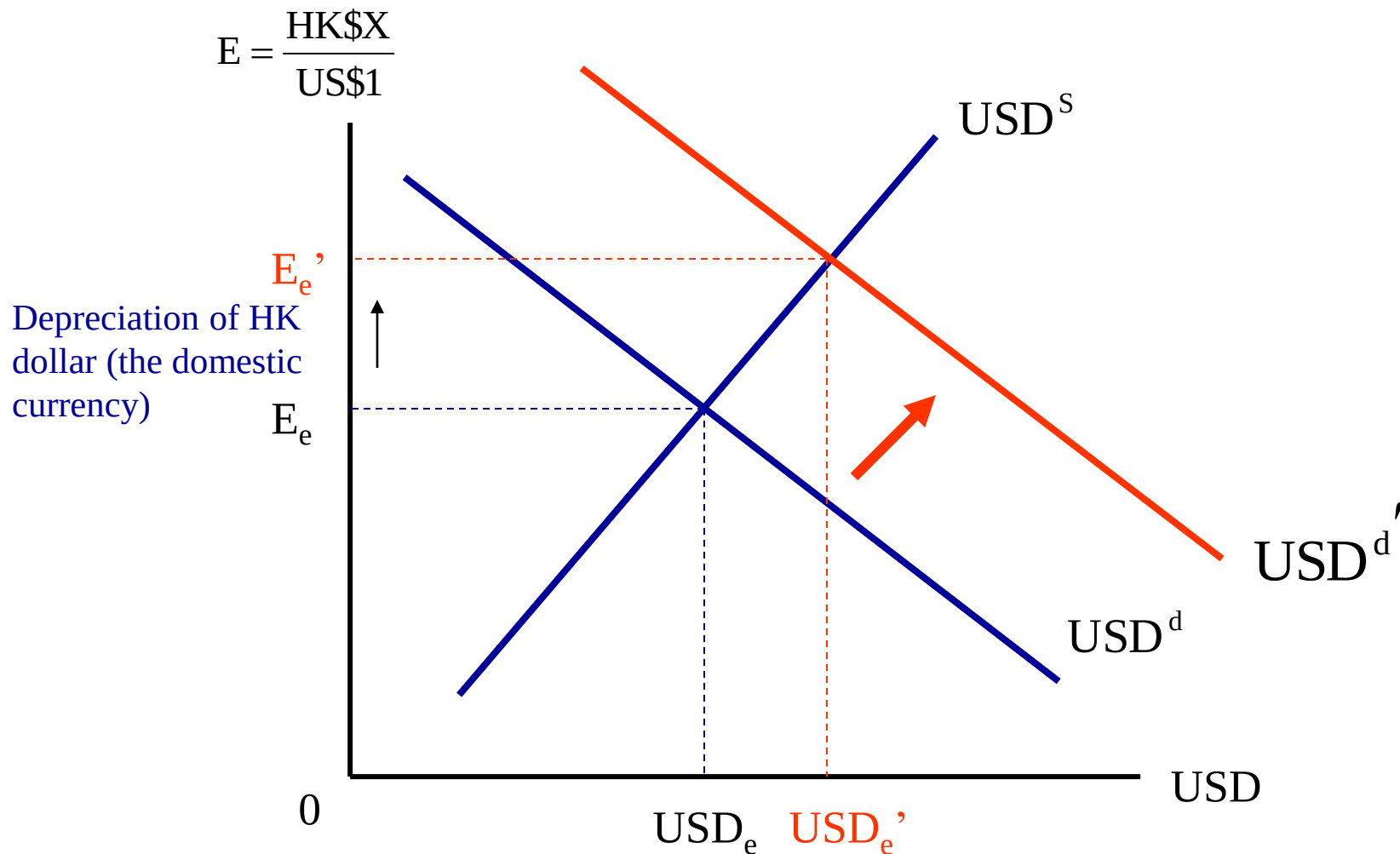
$$\text{USD}^S \uparrow = f(E \uparrow; X \uparrow, \text{Capital Inflow} \uparrow, \text{FX Reserves} \downarrow)$$

Demand for the foreign currency

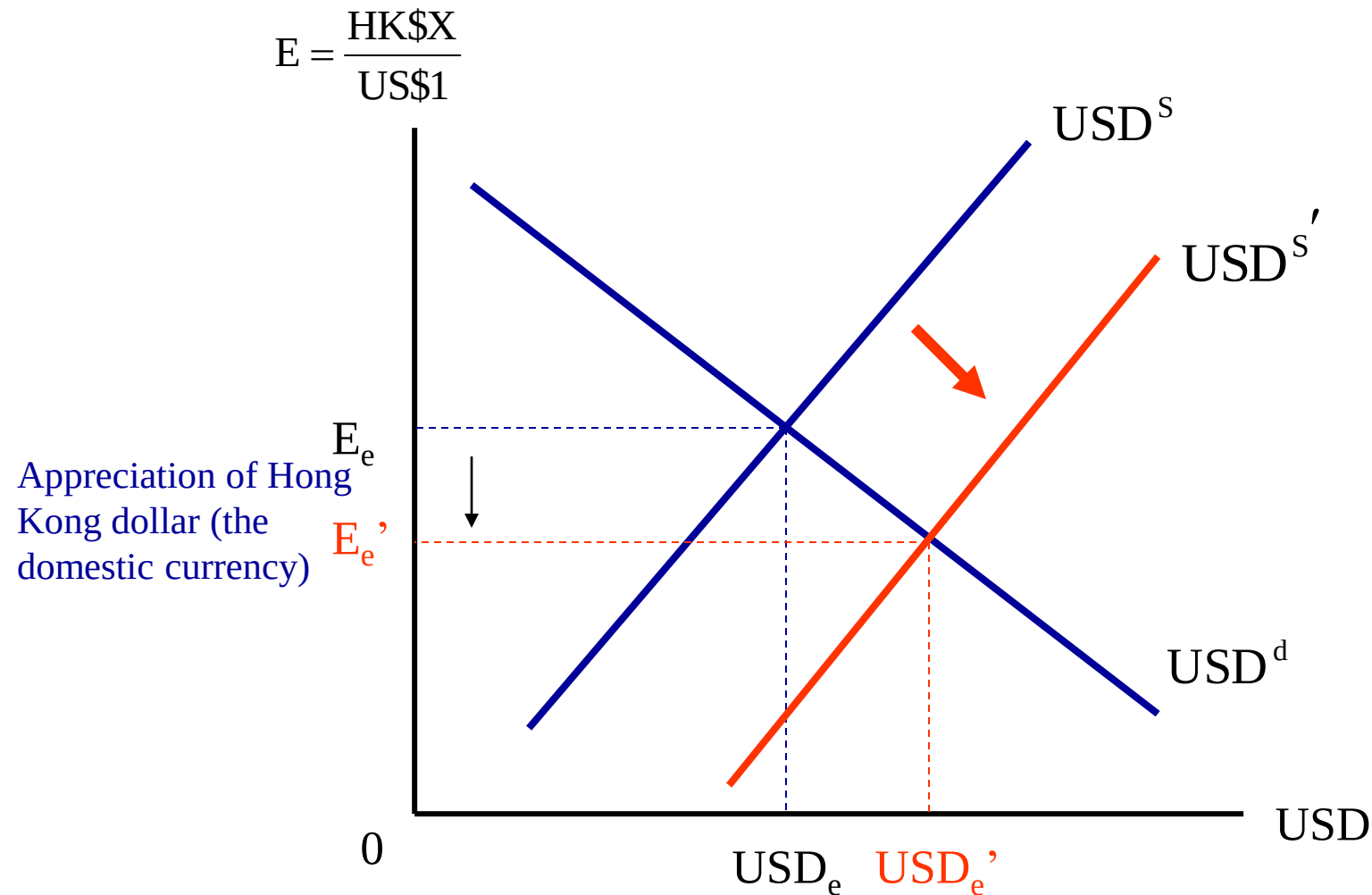
- It arises because holders of the domestic currency wish to make payments in a foreign currency.
- It originates in the debit items in the BP.
- slopes downwards from left to right.

$$\text{USD}^d \uparrow = f(E \downarrow; M \uparrow, \text{Capital Outflow} \uparrow, \text{FX Reserves} \uparrow)$$

Comparative static analysis (1): An increase in imports



Comparative static analysis (2): An increase in FDI inflow



Big Mac PPP (Source:The Economist, 24/04/2003)

	Local currency price (2)	USD price (3)	USD PPP (4)	Actual exchange rate (5)	Over (+) or under (-) evaluation (%)
<i>United States</i>	\$ 2.71	2.71			
<i>UK</i>	£ 1.99	3.14	1.36*	1.58	+ 16
<i>Eurozone</i>	€ 2.71	2.97	1.00*	1.10	+ 10
<i>Argentina</i>	Peso 4.10	1.43	1.51	2.88	- 47
<i>Poland</i>	Zł 6.3	1.62	2.32	3.89	- 40
<i>Thailand</i>	Baht 59.0	1.38	21.8	42.7	- 49
<i>China</i>	Yuan 9.9	1.20	3.65	8.28	- 56
<i>Japan</i>	Yen 262	2.19	96.7	120	- 19

Note : except for the £ et the euro (€) whose exchange rate represents their value in dollars (indicated by a star *), column 5 gives the dollar value of the local currency. Column 3 results from dividing (2) by (5). Column 4 (dollar PPP) results from dividing (2) (local currency price of the Big Mac) by 2,54 (US price of the Big Mac) (except for the UK and the euro zone, where the reverse ratio is taken). Source : <http://www.economist.com>

Thank You