

Balance of Payment



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What is BOP?

- ◉ Balance of Payment (BOP)
The summary of all international economic transactions between the residents of a country and foreign residents
- ◉ BOP mainly states two transaction:
 - Exchange of goods/services
→ Current Account
 - Exchange of financial assets
→ Financial Account
→ Capital Account → introduced since 1993

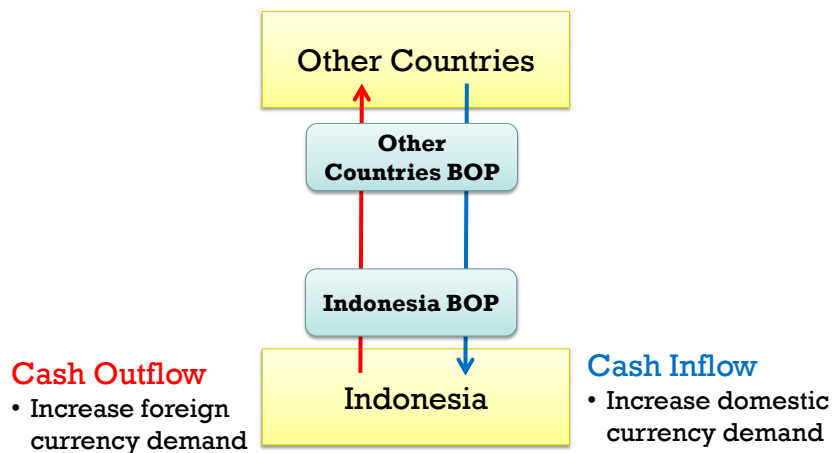


Reporting a BOP





- ◉ BOP commonly is created by central bank every quarter
- ◉ Reporting a BOP can be seen as combination of balance sheet and cash flow statement
 - **Balance sheet:** (1) double entry → credit and debit, (2) BOP is in equilibrium, i.e. deficit in current account should be offset by surplus in capital and financial account
 - **Cash flow statement:** BOP records the real flow of fund (not accrual)

Cash Inflow and Outflow



Simple Illustrations



Account	ABC (\$)	PQR (\$)	XYZ (\$)
Current Account Balance	2,000	5,000	(3,000)
Capital Account Balance	(20)	(50)	(50)
Financial Account Balance	(1,980)	(3,450)	2,500
Net Errors and Omissions	0	(100)	100
Overall Balance	0	1,400	(450)
	Balance (equilibrium)	Surplus	Deficit
			
For non free float regimes:			
National FX Reserve		+	-

BOP: What For?



- ◉ Provides detail information about supply and demand of a country's currency
 - Deficit or surplus in BOP reflects the supply and demand of a currency
 - CA deficit is usually accompanied by FA surplus (otherwise)
 - During certain periods, both CA and FA of a country might be in surplus (double surplus)
- ◉ Evaluate competitiveness level of a country in international market
 - Deficit in CA can be viewed as the lower competitiveness level of a country (product or location)
 - Example: US vs. China



Part-I

Balance of Payment Accounts



Current Account

Current Account records exports and imports of goods, service, income, and current transfer.

- ◉ **Goods:** merchandise, goods for processing, repairs on goods, goods procured in port by carrier, non-monetary gold
- ◉ **Service:** transportation, travel, communication, construction, insurance services, financial services, computer and information services, royalties and license fees, personal, cultural and recreational service, government service, etc.
- ◉ **Income:** employee compensation (for non-residents), investment income (direct, portfolio, and other investment)
- ◉ **Current (unilateral) transfer:** non-exchange transactions, such as: gift or donation, workers' remittance (for residents), penalty on late payment

Indonesia Current Account



(Millions of USD)

	2007	2008	2009	2010	2011
A. Goods	32,754	23,309	30,932	30,628	35,347
* Non Oil and Gas	27,084	15,549	25,560	27,395	35,276
* Oil and Gas	5,670	7,761	5,372	3,233	71
B. Services	(11,841)	(13,011)	(9,741)	(9,324)	(11,823)
* Transportation	(7,294)	(11,051)	(4,083)	(6,007)	(8,714)
* Other services	(4,547)	(1,960)	(5,658)	(3,317)	(3,109)
C. Incomes	(15,525)	(15,335)	(15,140)	(20,790)	(25,667)
* Employee Compensation	(313)	(435)	(778)	(781)	(884)
* Investment Income	(15,212)	(14,900)	(14,362)	(20,009)	(24,782)
D. Current Transfer	5,104	5,643	4,577	4,631	4,212
* General Government	180	210	89	287	322
* Other Sectors	4,924	5,433	4,488	4,344	3,890
Current Account	10,492	606	10,628	5,144	2,070

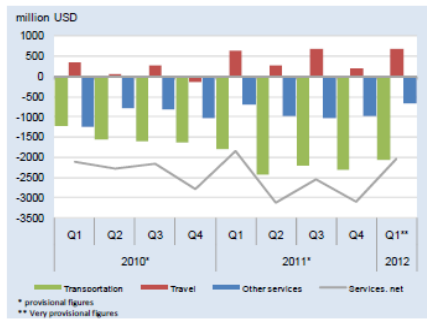
Indonesia Export and Import



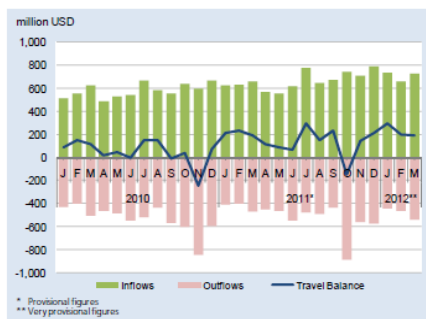
Export	Share (%)		Growth q.t.q (%)								Country	Q1-2012**			
			Nominal		Real		Price Index					Value (mill USD)	Share (%)	Growth (%)	
	2011*	2012	2011	2012	2011	2012	2011	2012	q.t.q	y.o.y					
	Q1**	Q4*	Q1**	Q4*	Q1**	Q4*	Q1**	Q1**							
1. Coal	16.5	17.7	10.0	-14.0	14.1	-13.0	-3.6	-1.1	Japan	7,734	16.0	1.9	0.4		
2. Palm Oil	10.6	12.1	14.4	-3.9	20.9	-4.6	-5.4	0.8	China	5,249	10.9	-28.3	29.2		
3. Textile & Textile Product	8.2	8.3	-6.9	0.8	-6.3	1.2	-0.7	-0.4	European Union	4,494	9.3	-6.0	-7.2		
4. Electrical Appliances	7.1	7.2	-6.2	-4.0	-9.4	-5.1	3.5	1.1	South Korea	3,976	8.2	3.2	9.8		
5. Rubber Product	8.7	6.8	-15.0	-15.2	-10.8	-14.7	-4.7	-0.5	Singapore	3,737	7.7	2.5	-4.6		
6. Metal Product	7.3	6.6	-22.6	6.0	-17.2	2.7	-6.6	3.1	USA	3,733	7.7	-11.1	-11.2		
7. Processed Food	2.9	3.3	19.6	-10.2	20.7	-10.6	-0.9	0.4	India	3,068	6.4	-1.9	15.7		
8. Papers	2.6	2.6	-8.4	1.1	-5.8	-0.9	-2.7	2.0	Malaysia	2,942	6.1	12.2	-0.7		
9. Chemicals	2.9	2.3	-14.4	-16.4	-13.6	-15.3	-0.9	-1.4	Thailand	1,668	3.5	57.9	-9.9		
10. Processed Wood	2.0	2.2	12.2	-6.2	16.9	-5.5	-4.0	-0.7	Taiwan	1,565	3.2	-9.9	17.1		
									Others	10,058	20.9	-6.0	15.0		
									Total	48,223	100.0	-4.8	5.1		

Import	Shares (%)		Growth (%)				Country	Q1-2012**			
			q.t.q		y.o.y			Value (mill USD)	Share (%)	Growth (%)	
	2011*	2012*	Q411*	Q112*	Q411*	Q112*				q.t.q	y.o.y
	Q411*	Q112*	Q411*	Q112*	Q411*	Q112*					
Raw Materials (Processed), for Industry	39.1	40.0	4.2	2.9	23.5	19.4	China	7,039	19.6	2.5	33.3
Capital Goods (except Transport Equipment)	17.4	17.8	12.3	-7.3	21.0	23.9	Japan	5,644	15.7	1.7	27.6
Parts & Accessories for Capital Goods	12.4	11.8	3.4	-6.4	13.7	12.7	European Union	3,072	8.6	-10.4	17.4
Transport Equipment for Industry	5.9	7.0	22.8	-12.8	80.9	76.4	Thailand	2,731	7.6	15.6	5.7
Parts and accessories for Transport Equipment	5.3	5.8	2.0	7.0	4.6	26.4	Singapore	2,601	7.2	-0.6	5.3
Raw Materials (Primary), for Industry	5.0	3.8	-2.8	-15.5	24.1	-3.8	Others	14,832	41.3	-7.3	16.3
Food and beverages (Processed), Mainly for Household	3.0	2.4	-6.9	-18.7	10.7	-5.7	Total	35,920	100.0	-2.5	19.2
Food and beverages (Primary), Mainly for Industry	2.7	2.2	30.4	-22.1	39.7	-25.0					
Food and beverages (Processed), Mainly for Industry	2.4	2.1	-4.1	-5.1	-0.6	0.8					
Food and beverages (Primary), Mainly for Household	1.4	1.4	-35.6	14.3	29.8	23.3					

Indonesia Service Balance

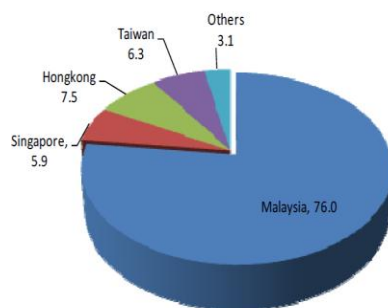


Total Service Trade Balance

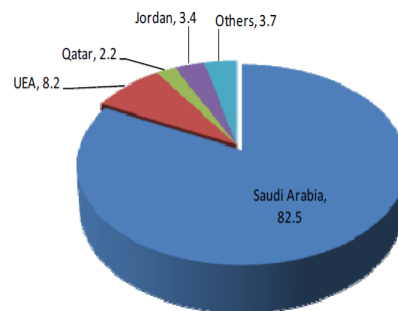


Travel Balance

Migrant Workers



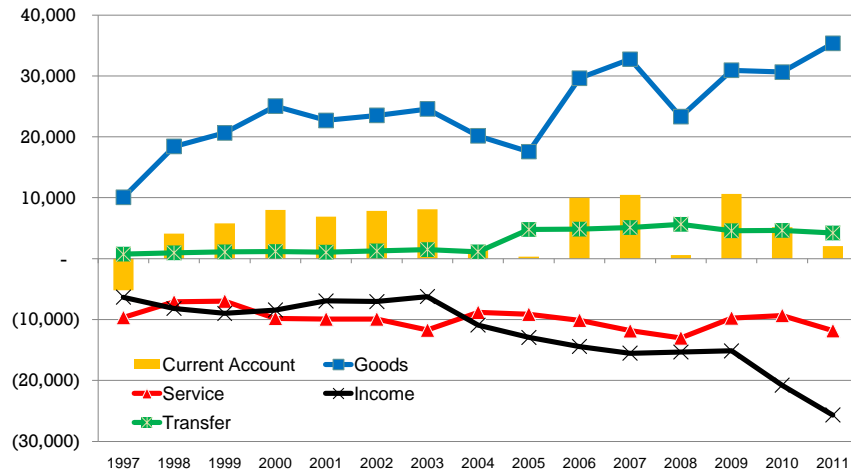
Asia Pacific Region



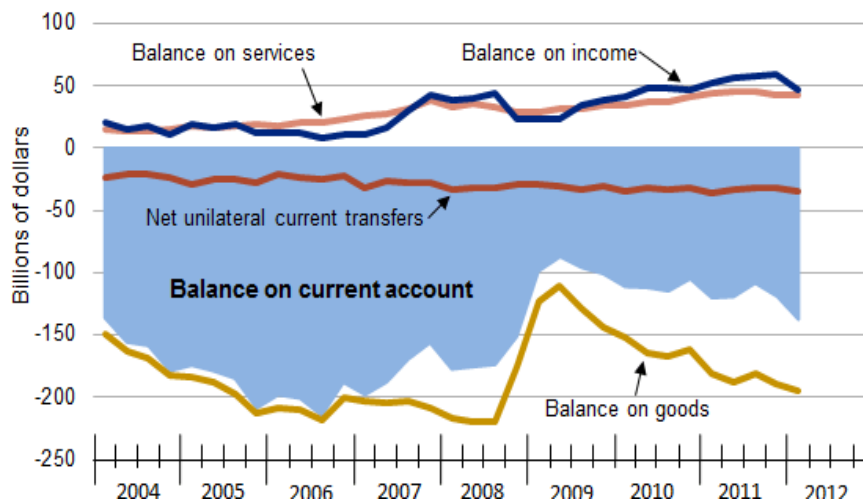
Middle East and Africa Region

Indonesia Current Account

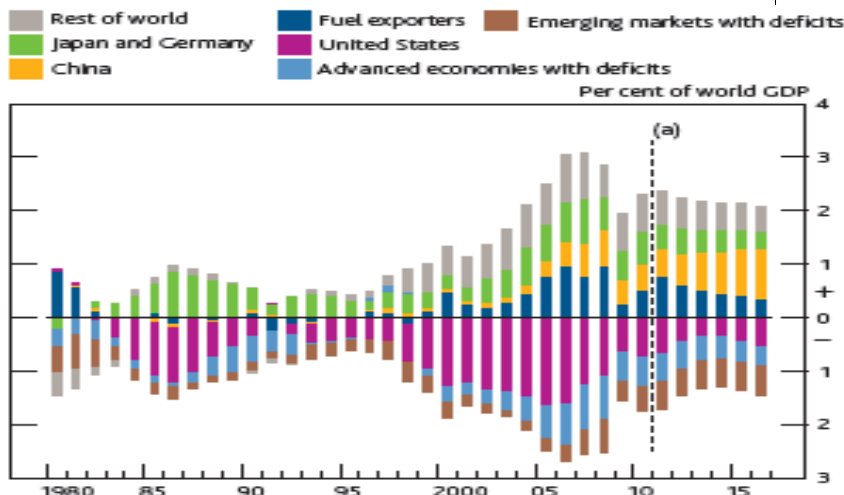
Million \$



US Current Account Balance



Global Current Account Balance



Financial Account

◉ **Financial Account** records the transactions of financial assets and liabilities

- **Foreign Direct Investment (FDI)**: long-term investment in foreign countries, such as create subsidiaries, set up new business, earning reinvestment, acquire 10% or more of ownership in a company.
- **Portfolio Investment**: investment in financial assets which ownership do not attain 10% (stock, bond, derivatives, etc). It is commonly a short-term investment.
- **Other Investment**: such as foreign exchange loans, time deposit in foreign bank, trade credit, etc.
- **FX Reserve Assets**: assets that are readily available to finance imbalance payment by monetary regulator (gold, SDR, USD, etc)

Capital Account



- ◉ **Capital Account:** comprises transactions of:
 - Capital Transfer:
 - Investment grant (equipment, machinery, cash provision to build road, dock, building, bridge, etc.)
 - Debt forgiveness (from non-resident person/institution)
 - Migrants' transfer (the shift of migrant's assets across country)
 - Buy or sell non-produced and non-financial assets:
 - Purchase or sell of tangible asset (e.g. land, real estate) and intangible asset (e.g. copyright, trademark, brand, license)
- ◉ In most countries, the magnitude of total capital account is relatively minor.

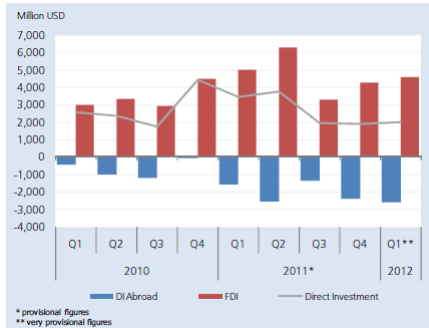
Indonesia' Capital and Financial Account



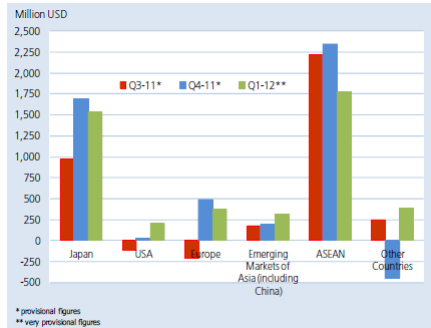
(Millions of USD)

	2007	2008	2009	2010	2011
Capital Account	546	353	96	50	1
Financial Account	3,045	(2,059)	4,756	26,572	14,017
* Foreign Direct Investment	2,253	2,479	2,628	11,106	10,437
* Portfolio Investment	5,566	1,753	10,336	13,202	4,198
* Other Investments	(4,775)	(6,291)	(8,208)	2,262	(618)
Capital and Financial Account	3,591	(1,706)	4,852	26,622	14,018

Foreign Direct Investment

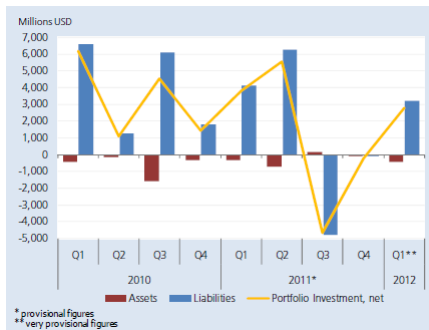


FDI

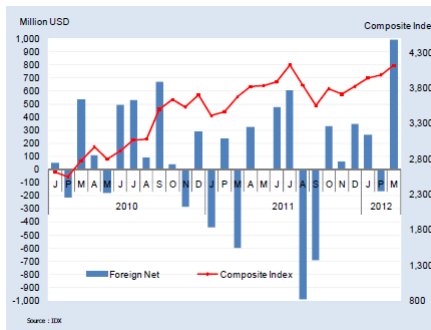


FDI by Country of Origin

Portfolio Investment

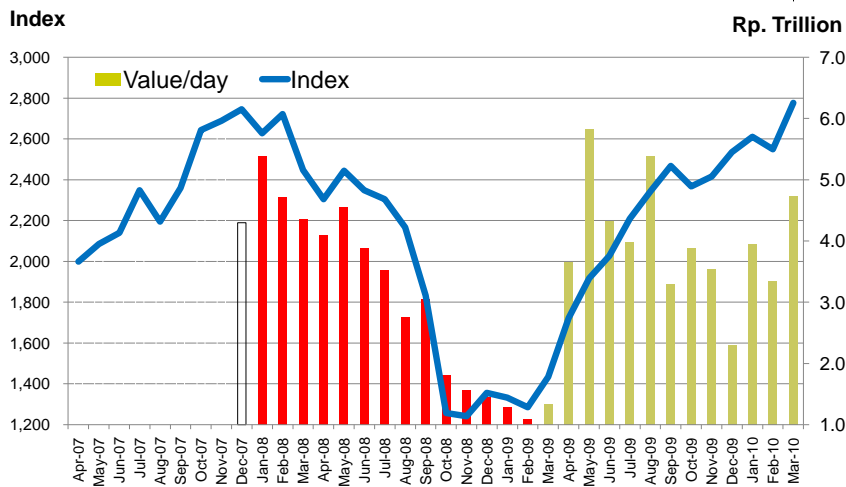


Portfolio Investment

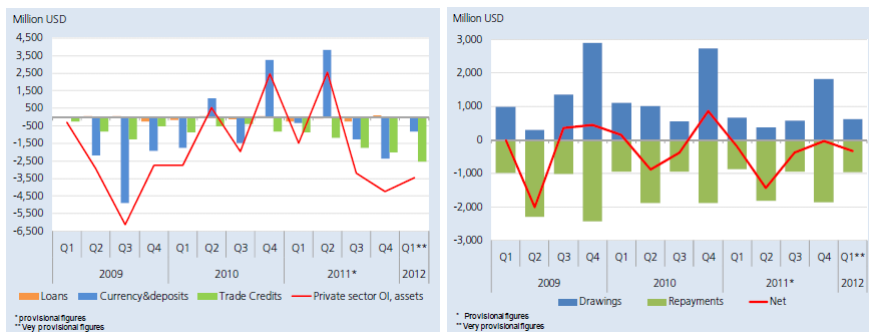


Foreign Transaction in IDX

Indonesia Stock Exchange



Other Investments



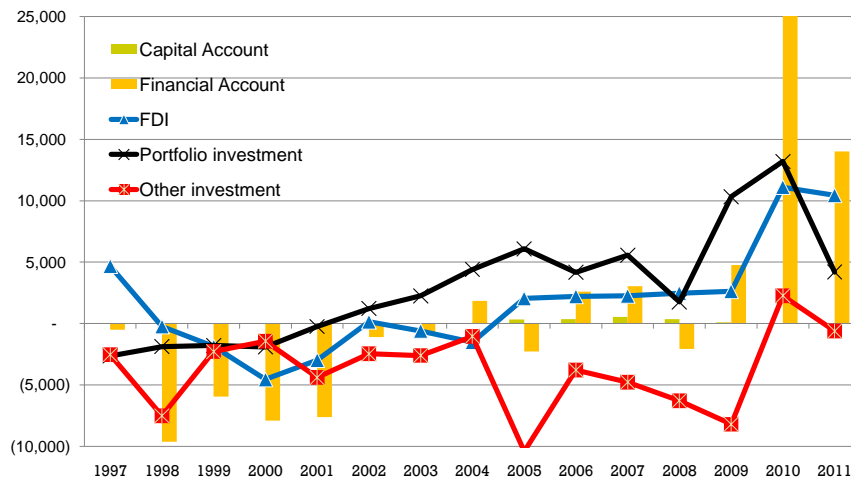
**Other Investment
(Private Sector)**

**External Debt
(Public Sector)**

Indonesia Financial and Capital Account



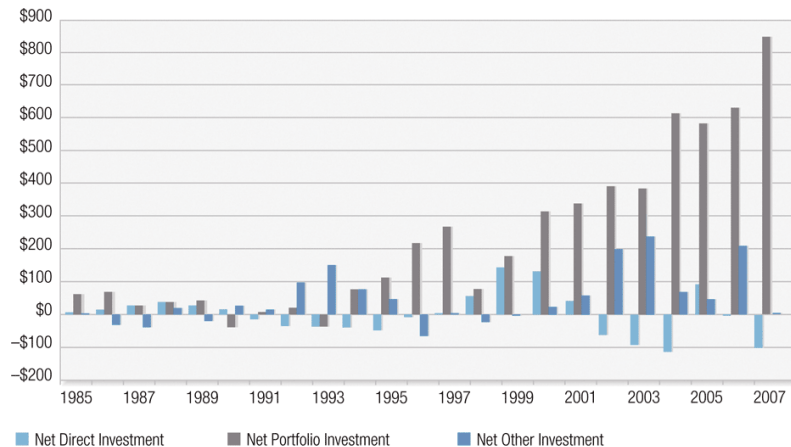
Million \$



US Financial Account



\$ Billion



Source: International Monetary Fund, Balance of Payments Statistics Yearbook, 2008.

Indonesia BOP



(Millions of USD)

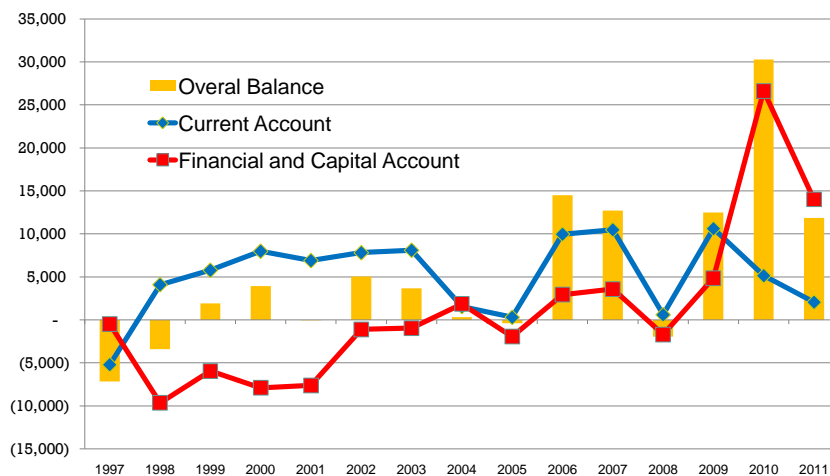
	2007	2008	2009	2010	2011
I. Current Account	10,492	606	10,628	5,144	2,070
II. Capital & Fin Account	3,591	(1,706)	4,852	26,622	14,018
III. Basic Balance (I+II)	14,083	(1,100)	15,480	31,766	16,088
IV. Net Error & Omissions	(1,368)	(845)	(2,975)	(1,480)	(4,232)
V. Overall Balance (III+IV)	12,715	(1,945)	12,506	30,286	11,856
VI Reserve***	(12,715)	1,945	(12,506)	(30,286)	(11,856)
Reserve Asset Position	56,920	51,639	66,105	96,207	110,123

*** Negative represents surplus, positive represents deficit

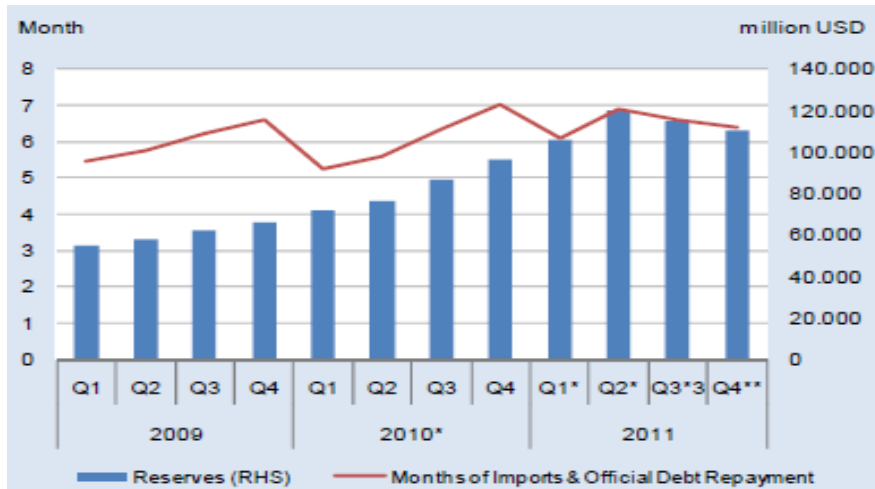
Indonesia BOP



Million \$



Reserve Assets Position



Source: www.bi.go.id

Exercise-1



Identify how the transactions below affect Indonesia BOP:

1. PT. Unilever Indonesia paid back 2011's dividends of \$5 millions to its parent company.
2. Indonesia resident takes general check up package in Mt. Elizabeth Singapore for \$5,000.
3. Hong Kong investor bought 1,000 lots of BMRI for \$200,000 in Indonesia Stock Exchange.
4. PT. Astra International borrowed \$10 million from Citibank New York for three months, and paid interest of \$10,000.
5. Government of Indonesia sent a set of clothes worth \$500,000 for Tzunami victims in Japan.
6. RIM opened a service center in Jakarta by investing \$1 million.
7. You are going to study to Harvard University (tuition fee = \$50,000), and you buy a home in Boston worth \$300,000.

Exercise-2



Holding other factors constant, which of the following would increase the size of the Indonesia current account deficit?

- A. An increase in the amount of services purchased from foreigners
- B. An increase in unilateral transfers from Indonesian to foreigners
- C. An increase in Indonesian's net investment income
- D. Only (A) and (B) of the above

Exercise-3



The current account balance plus the financial account balance equals

- A. the official reserve transactions balance.
- B. the trade balance.
- C. the change in government reserve assets.
- D. both (A) and (C) of the above.

Exercise-4



Economists closely follow the current account balance because they believe it can provide information on the future movement of

- A. interest rates
- B. gold flows
- C. exchange rates
- D. special drawing rights

Exercise-5



The financial and capital account describes the flow of capital between the Indonesia and other countries. Capital inflows are

- A. Indonesian purchases of foreign assets.
- B. Foreign purchases of Indonesia assets.
- C. Both (A) and (B) of the above.
- D. Neither (A) nor (B) of the above.

Exercise-6



PT. Freeport Indonesia (FI) imported an equipment worth \$400 million on Sept 2012 from a supplier in Spain. How does this transaction affect Indonesia's BOP in 2012, if:

- a. FI bought on cash?
- b. FI paid 20% of down payment, and the rest is paid next year using trade credit offered by supplier?
- c. FI paid 20% of down payment, and the rest is financed using loan from Citibank New York with annual payment during 3 years?



Part-II

Balance of Payment Analysis

BOP Measure



◉ Current Account (CA) Balance or Trade Balance:

- The fundamental transactions of export and import
- It represents the real goods exchange between a country and the rest of the world

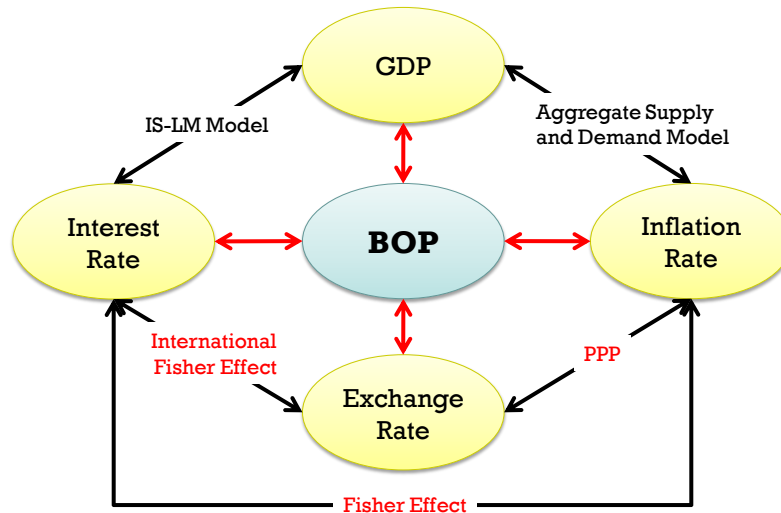
◉ Basic Balance:

- The difference between CA balance and long-term capital (FDI and long-term borrowing).
- It represents the fundamental transactions considered to the economic health of a currency

◉ Overall Balance (Official Settlement Balance)

- It represents the adjustment required in official reserves to achieve BOP equilibrium

BOP and Key Macroeconomic Indicators



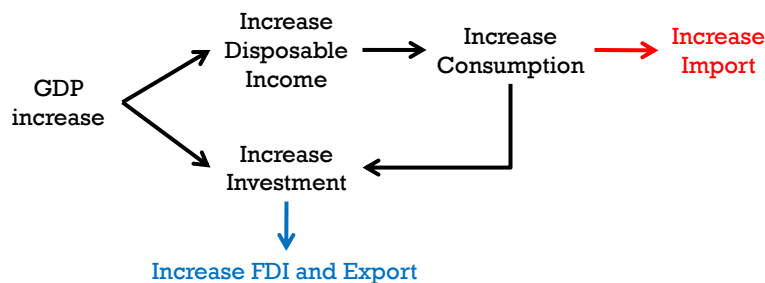
BOP and GDP



- Accounting logic:

- Current Account Surplus (+) → increase GDP
- Current Account Deficit (-) → decrease GDP

- Cash Flow logic:



BOP and Interest Rate

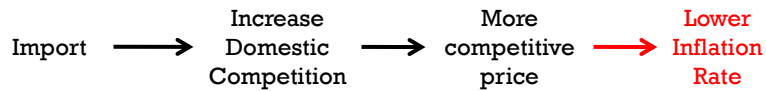


- Interest rate of a country compare to other countries' interest rate will directly affect financial account.
- Higher interest rate → higher return
 - Attract capital to flow in
 - Increase financial account
- Lower interest rate → lower return
 - Enforce capital to flow out
 - Reduce financial account
- Note: capital inflow and outflow do not only depend on country interest rate.*

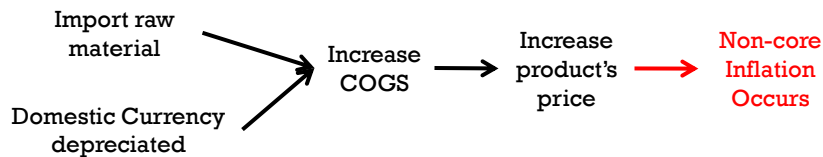
BOP and Inflation Rate



In general, increasing import will lower inflation rate:



Special condition in non-floating exchange rate countries:



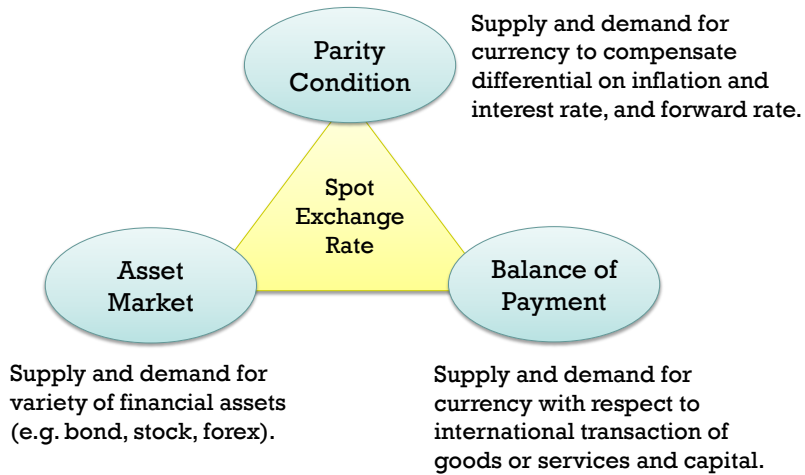
BOP and Exchange Rate



If an imbalance in the BOP occurs (basic balance surplus or deficit far from zero), then:

	Surplus	Deficit
Fixed Exchange Rate, and Pegged	Sell domestic currency for foreign exchange (keep in national reserve)	Buy domestic currency with foreign exchange or gold in national reserve
Floating Exchange Rate	<ul style="list-style-type: none"> No intervention Domestic currency will appreciate 	<ul style="list-style-type: none"> No intervention Domestic currency will depreciate
Manage Floats	<ul style="list-style-type: none"> Reduce interest rate carefully Daily selected intervention 	<ul style="list-style-type: none"> Increase interest rate carefully Daily selected intervention

Determinant of Exchange Rate



Thank
You

