Course: World economy

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Contents: The aim of the lecture is to explain the concept of an open economy and the factors that affect the openness of the economy. In the next part of the lecture will be characterized causes of Foreign Trade and explained the concept of the balance of payments, its structure and possible mechanisms of leveling the balance of payments.

Analysis four sector model economy

The analysis determining the equilibrium production is now engaging the external sector, and the role of the first balance of goods and services. In an open economy, the home country of production is exported to other countries as part of the goods and services that are consumed or invested in the home country, is produced abroad and imported. Exports thus means demand for goods and services produced by domestic entities of the country. In contrast, imports are leakages from the normal flow of income, for example income spent part of the bodies home country is spent on goods and services produced in the domestic economy, but forms a pension entities from other countries.

Four-sector model contains abroad. Total planned expenditures are enhanced by net exports, which is the difference between exports and imports. (1)

$NX = X – M$

$NX = X - Ma - m.Y$

Export

We need a model to be considered autonomous value (independent of the size of the domestic income).

What factors determine the value of exports of home country? The real value of sales companies home country to other countries, that export demand for domestically produced goods and services is influenced by many factors:

- Foreign pension

- The ratio of price level in other countries, the domestic price level

- The nominal exchange rate

- Government support or restrictions on exports

- Consumer preferences

If foreign income increases (in the expansion), foreign demand for goods and services in the domestic country increases, ie exports from the home country are growing at every level of national income. Conversely, a reduction in foreign income (recession) reduces exports from the home country at every level of national income.

When reducing the domestic price level relative to foreign price level: it is a home goods and services cheaper, domestic exports of the country are increasing. When the domestic price level relative to foreign price level increases, making domestic goods and services more expensive for those in foreign countries, the home country's exports are reduced.

Depreciation (devaluation) of the currency home country, and therefore increase the nominal exchange rate, lower the rates for domestic goods and increases export demand for domestic goods, ie stimulates an increase in exports.

Import

However, it has different characteristics. In addition to the autonomous components (Ma) has also induced component, because income growth is increasing the demand for foreign goods. People to meet their needs can benefit from imported products.

So we can assume that each increment of income is spent on the purchase of imported goods.

Imports of goods and services, home country from other countries are dependent on:

- The level of domestic income

- The ratio of the price level of domestic goods and services and foreign price level, exchange rates

- Trade restrictions (customs duties, restrictions, etc.)

- Consumer preferences

With the growth of retirement home country, the demand for foreign goods and services increases. Imports home country are increasing. Nose pliers if retirement home country, the demand for foreign goods and services decreases, the imports falling home country.

Sensitivity of imports to changes in income is measured by the marginal propensity to import (m). Marginal propensity to import expresses what part of the increase in income is spent on goods and services produced and imported from abroad. Thus:

Δ m = M / Δ Y

A specific form of import function can be written as follows:

M = M + mY

where M is an autonomous imports, ie import of independent retirement home and we are dependent on imports of retirement.

The inclusion of exports and imports into the equation of aggregate demand, we can aggregate demand in an open economy specified as follows:

AD = C + I + G + X – M

The multiplier in an open economy

The expression 1/1 - MPC (1 - t + m is a multiplier in an open economy, respectively. Autonomous expenditure multiplier in an open economy **.**

Expression - m / 1 - MPC (1 - t) + m is referred to as a multiplier of net exports. (3)

Open Economy

The openness of the economy reflects its involvement in international economic relations, which are represented by the movement of goods, services, factors of production and financial assets.

The degree of openness of the economy is expressed by the ratio of export / GDP or (Export + Import) / GDP.

Countries have different causes of different degree of openness. The low level of openness may have developed countries with large internal market - the so-called self- economics, or underdeveloped economies with low competitiveness on the world market. The high degree of openness have small advanced economies widely involved in international trade and developing countries with a high share of exports in GDP due to the narrow specialization, or newly industrialized countries, where export significantly determines the growth of GDP (these economies is also called "Asian tigers " - South Korea, Hong Kong, Singapore, Taiwan, Thailand, Malaysia and others).

International Trade

They all exchange transactions across the borders of the national economy.

Causes of Foreign Trade:

• **different natural and climatic conditions** - for example in the economies of the temperate zone of imported tropical fruits (bananas and citrus) or coffee, and tropical countries turn cereals out there that is not possible in the required amount to cultivate. Each country has oil deposits, therefore it is imported, or no access to the sea, to offer a seaside tourist resort;

• **different preferences and tastes of consumers in different countries** - this creates the opportunity to specialize in production for foreign markets. In the Czech Republic can be a Czech glass or porcelain pink, that are of interest abroad, or breeding snails for the French market;

• **conflict of production and consumption** - relates to the fundamental economic problem: people have unlimited needs and at the same time fan their needs constantly growing, while manufacturing resources of the economy are limited. Through foreign trade, consumers of the economy to increase its overall benefit purchase of imported goods and companies may import the necessary raw materials;

• **Implementation of absolute advantage** - the country can provide its output in low prices due to cheap labor, using cheaper or better quality raw materials due to improved technology or due to favorable natural and climatic conditions. If the country produces more efficiently - ie. offers a higher output when using a given amount of production factors in comparison with other countries, executes an absolute advantage;

Balance of payments

Balance of payments (PB) records all transactions of entities of the economy (residents) with foreign countries. It is an international movement of goods and services, income, transfers in the international sphere, long-term and short-term capital and reserves. (3)

The balance of payments is always balanced accounting - does not mean that the balance of payments is in equilibrium imbalances which balance the conflicting movements of its individual accounts or in the final stage of change of foreign exchange reserves.

The financial balance

- Any current account deficit PB cover is a surplus of capital and financial account and / or drawing of foreign exchange reserves of the country

- Surplus on the contrary, used to cover the financial account deficit or to increase foreign exchange reserves of the country

He spends the bodies, abroad more than income from abroad (current account (CA) as the balance of payments deficit is getting into, this deficit must be financed by surplus of the financial account, respectively capital, which is generated by capital inflows or even a decrease in official reserves.

- Current account deficit can be financed either by selling assets to private entities abroad and their foreign borrowings or by the state (CB) reduces its foreign exchange reserves, so it sells to foreign markets

- Current account surplus of the private sector to use its foreign revenue to repay foreign debts or to purchase assets abroad, or the CB excess foreign currency received by the private sector to buy and connect them to their foreign exchange reserves

Interpretation distinguishes her balance / imbalance

- Balance - It occurs when the current account deficit is fully covered by the surplus of financial, resp. capital account or current account surplus if fully depleted deficit in the financial account and capital.

- Deficit PB - CA even if the financial and capital account getting a whole into deficit - CB foreign exchange reserves are reduced.

- Surplus PB - increase in official reserves - if CB excess foreign currency arising from operations on individual accounts buy and attach it to their foreign exchange reserves.

- surplus / deficit is in relation to the various parts of the PB
- frequently used balance : balance of trade, the balance of power balance (balance of trade and balance of services), the current account balance

Power Balance - balance - positive means that the domestic economy produced more goods and services than are consumed and aggregate export demand contributed.

- Current account deficit - to compensate for the PB was necessary to arrive at selling property abroad or foreign borrowings.

- Surplus CA - PB compared to the export of capital abroad or buy foreign assets.

- The equilibrium current account - there is no pressure on the exchange rate or interest rate.

We distinguish:

- Horizontal structure of the balance of payments
- The vertical structure of the balance of payments

The horizontal structure of PB

It consists of individual account balance. It is divided into 5 parts: current account, capital account, financial account, errors and omissions, foreign exchange differences, change in foreign exchange reserves.

• current account, which consists of exports and imports (trade balance) and services (transport, insurance, tourism, licenses, patents, works, etc.). Balance of goods and services balance is referred to as the balance of power. The current account also includes pensions production factors and transfer payments that do not lead to the emergence of foreign receivables or liabilities (social benefits, donations, contributions to international organizations, economic assistance, etc.);

• capital account, which records capital transfers. In the balance of payments here include transfers in relation to the EU budget or emissions trading;

• Financial account, which gives an overview of the development of the receivables and payables of the economy to foreign residents. According to IMF methodology is divided into direct investment (foreign and foreign -resident), portfolio investment, financial derivatives and other investments (short-term and long-term, private and government);

• Errors and omissions exchange rate differences constitute another point of balance. This reflects the fact that all transactions are properly covered. In some cases, estimates, are not included in the records of illegal transactions or data collected from various sources and inaccuracies arise.

• Change in reserves (exchange account) the sum of the balances of the previous four items and has the opposite sign (negative sign means an increase in foreign exchange reserves and a positive drop).

The vertical structure of PB

Corresponds to credit and the debit writing various transactions. Each transaction is recorded in the balance of payments 2x (double billing). Credit box with a + sign are intended for export goods, the influx of income and transfers and import of capital (increase in liabilities and a decrease in receivables). Debit box with sign - are intended for import goods, income and transfers outflow and export capital (reduction in liabilities and an increase in accounts receivable). If, for example Czech company exports goods of a certain value , this amount will be reflected in the current account of balance of payments in the export line (credit entries +) and financial account (debit entry -), since it is the increase in receivables.

The country's balance of payments (BP) is in equilibrium when it is in equilibrium either current account and capital account, or if the deficit (surplus) of the current account is exactly offset by the surplus (deficit) capital account.

For the balance of payments can be written :

BP = CA + CF

Current Account (CA), respectively Net exports (NX) are determined YF foreign income, domestic income (Y) and the real exchange rate (R). The capital account is denoted by CF.

World and domestic interest rate

A significant factor that determines the capital account is the level of interest rates home country (i), compared with an average interest rate of the world (if). Investors in shaping their portfolio transfer their assets to a country where they have these funds bring the highest return.

Perfect capital mobility exists in the international sphere if investors can buy assets in any country they choose, with low transaction costs, quickly and in an unlimited range.

Perfect capital mobility means if funds can be moved from one country to another, ie when:

- There are no differences in taxes between countries,

- A stable exchange rate,

- There are no other political and other barriers to capital outflows and revenues from one country to another.

Under conditions of perfect capital mobility can not be domestic interest rates too high and too long a deviation from the world interest rate.

In terms dock M. triggered by strong capital inflows - if the domestic interest rate is above the world interest rate and therefore a massive asset purchases home country investors from other countries and domestic investors, which rapidly increase their prices and reduce domestic interest rates to level of world rate.

On the other hand, if the interest rate home country on the international currency market, which will reduce the prices of these assets and increase domestic interest rate to the world. (4)

References:

Translated on the basis of Ing. Lenka Brizgalová Ph.D documents.

1. HYNKOVÁ, V. *Makroekonomie I – pro bakalářské studium*. 1. vyd. Brno:Univerzita obrany, 2008. ISBN 978-807231-278-8.
2. HYNKOVÁ, V. *Makroekonomie I – pro bakalářské studium*. 3. vyd. Brno:Univerzita obrany, 2010. ISBN 978-807231-278-8.
3. MACH, M. *Makroekonomie II*. 2. vyd. Praha: MELANDRIUM, 2003. ISBN 80-86175-34-0.
4. http://www.ius-wiki.eu/tnh/pfuk/tnh/zkouska/otazka-64