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The Effect of Stabilization Programmes
on Economic Growth

For each economy it is very important to achieve and maintain macroeconomic stability. Internal and external stability is significant for economic growth and development. Countries that have problems with macroeconomic stability very often participate in different stabilization programmes run by the International Monetary Fund (IMF). This monetary institution offers credits for its members and supported countries have to adopt appropriate policy packages. However, the application of policies that focus on internal and external equilibrium very often results in national income loss.

The aim of the article is to show the impact of IMF stabilization programmes on economic growth.

A THEORETICAL FRAMEWORK OF IMF STABILIZATION PROGRAMMES

The IMF was created at the Bretton Woods Conference in July 1944. It came into formal existence in December 1945 and began operations in March 1947. During over sixty years the IMF has become the central financial institution in the world. The number of its members increased from 44 countries in 1946 to 188 in 2012. Nowadays the Fund includes almost every country. The most known exceptions are Cuba and North Korea.

The IMF was established in order to promote exchange stability and international monetary cooperation. An orderly monetary system has facilitated expansion of international trade and raised economic activity throughout the world. Up to 1973 the IMF was treated as a guarantor of fixed exchange rates among industrial countries. From 1978 its role has expanded. Nowadays the Fund is a crisis manager and development financier for developing countries [Bordo, James, 2000, p. 4].

The IMF approach to macroeconomic stabilization uses monetary model of the balance of payments. The basis of IMF's stabilization programmes is the Polak [1957] model on monetary programming. The model yields a policy packages that has to be realized by supported country.

The Polak model integrates monetary, income and balance of payments analysis [Polak, 1997, p. 385]. The standard Polak model is based on four equa-

tions. It contains two behavioural relationships: the demand for money function and the function of the demand for imports and two identities: for the money supply and for the balance of payments.

In the model the stock of money and imports of goods and services are endogenous variables. The model has also three exogenous variables: nominal income, exports of goods and services and the net capital inflows of the non-bank sector. The change in foreign currency reserves is a targeted variable and the change in domestic credit is a policy instrument [Agénor, 2004, p. 365].

The model yields a unique relationship between changes in domestic credit and changes in international reserves. The key to stabilize the level of foreign reserves and the balance of payments is a control over net domestic credit expansion. A country cannot at the same time reverse a balance of payments deficit and increase domestic credit. The model shows how to calculate the rate of domestic credit creation consistent with a target improvement in the balance of payments [Nowak, 2012, p. 35].

The Polak model was modified in various ways. In its simplest extended version nominal income is regarded as an endogenous variable and the authorities have two policy instruments at their disposal. They can attain the targeted values for both the balance of payments and the rate of inflation [Khan et al., 1986, p. 19]. The targeted variables are the change in foreign currency reserves and domestic prices. The policy instruments are the change in domestic credit and nominal exchange rate.

In the IMF approach to stabilization it is assumed that imbalances are caused by excessive expansion of aggregate demand. An increase in money supply leads to expansion of aggregate demand. If money supply exceeds money demand then people attempt to get rid of additional money. They buy domestic or foreign goods causing the increase in the level of inflation and imports.

The most important recommendation of the IMF is to restrict domestic credit. However, a restriction of the expansion of domestic credit in the banking system results in an increase in interest rate. A higher interest rate means higher investment costs and in the end low output growth and low employment.

Although in the short-term stabilization programmes are stagflationary a lot of countries participate in them and the IMF still develops new ones.

THE MAIN IMF STABILIZATION PROGRAMMES

The primary role of the IMF is to provide short- and medium-term financial assistance to the members that have temporary problems with a balance-of-payments equilibrium.

The resources for the IMF credits come from quota subscriptions paid by the members. Each member country pays the amount of money proportionate to its

economic size that is measured by national income and trade volume. The size of quota is adjusted to the economic power of a country at intervals of 5 years. A 25% of quota is paid in SDRs (Special Drawing Rights) or in international currencies. The remaining 75% a country pays in its own currency.

It is worth noticing that the quota also determines the voting power of a country. In result the members of the Fund do not have an equal voice. The largest shareholders have big influences on the IMF's decisions. In 2012 the major shareholders were United States (17.69 per cent of the total IMF quotas), Japan (6.56%), Germany (6.12%), France (4.51%), United Kingdom (4.51%), China (4%), Italy (3.31%), Saudi Arabia (2.93%), and Russia (2.5%) [www.imf.org].

If a country run into balance of payments disequilibrium it can automatically receive the first tranche of the IMF credit which is equal 25% of its quota. Larger amount of credit requires an financial arrangement between the Fund and its member. The IMF determines criteria which a country has to meet.

In order to help countries to overcome their balance of payments problems the IMF developed Stand-by Arrangement (SBA) in 1952 and the Extended Fund Facility (EFF) in 1974. However these programmes did not cover very low-income countries. For poor countries the Fund established the Structural Adjustment Facility (SAF) in 1986 and the Enhanced Structural Adjustment Facility (ESAF) in 1987. In 1999 the ESAF was replaced by the Poverty Reduction and Growth Facility (PRGF). The SAF and the ESAF/PRGF are structural programmes not strictly stabilization ones. Countries receiving foreign exchange assistance have to implement structural adjustment.

Stand-by Arrangement is usually used by middle income and advanced countries. SBAs are on average available for a period of 1–2 years. Repayment under the programme is between 3¼ and 5 years after the borrowing. From 2009 normal limit is 200 per cent of quota for any 12-month period.

The Extended Fund Facility provides assistance to countries that face medium-term balance of payments disequilibrium. Loans under this programme normally are approved for periods not exceeding three years and the repayment period is between 4½ to 10 years.

The IMF's facilities for low-income members: the SAF and the ESAF have similar characteristics but the second requires more rigorous conditions on economics policies.

Many countries have participated in loan programmes of the IMF. The main factors which the Fund takes into account in deciding whether to approve an arrangement are ability of a country to set policies which enhance fiscal revenues, reduce government expenditures and credit expansion, and adjust the exchange rate [Knight, Santaella, 1997, p. 431].

However, according to Barro and Lee [2005, p. 1246] countries that pay larger quota and have a larger number of citizens working as professional staff in

the Fund are more likely to receive loans. Besides, the loans and their size depend on political and economic proximity of a recipient country to the United States and the major Western European countries.

During period 1953–2011, the Fund has approved 1194 programmes. This total includes 867 short-term stabilization programmes (SBA) and 81 mid-term programmes (EFF). Tables 1–2 show the number and amounts approved for main IMF programmes from 1953 to 2011. Values of IMF loan programmes over the period are also presented in Figure 1.

The big number of SBAs in the early 1980s is a consequence of Latin American debt crisis. During 1985–2011 the number of short-term programmes has declined. However, the average size of the SBA loans increased. This is due to financial crises in such countries as Mexico, South Korea, Russia, Brazil, Argentina and Turkey. Nowadays Mexico, Greece and Ireland have to repay the greatest amount of IMF loans.

During period 1953–2011 the amount of approved IMF loans was growing in exponential way.

Table 1. Number of IMF loan programmes approved during financial years ended April, 1953–2011

Period	Stabilization programmes				Structural programmes		Total
	SBA	EFF	FCL[1]	PCL[2]	SAF	ESAF/ PRGF	
1953–1959	43	0	0	0	0	0	43
1960–1964	91	0	0	0	0	0	91
1965–1969	131	0	0	0	0	0	131
1970–1974	82	0	0	0	0	0	82
1975–1979	83	7	0	0	0	0	90
1980–1984	116	26	0	0	0	0	142
1985–1989	90	3	0	0	29	7	129
1990–1994	79	12	0	0	8	27	126
1995–2000	72	24	0	0	1	59	156
2001–2005	41	3	0	0	0	51	95
2006–2011	39	6	7	1	0	56	109

Source: IMF Annual Report 2000 (Appendix II, Table II-1), IMF Annual Report 2010 (Appendix II, Table II-1), IMF Annual Report 2011 (Appendix II, Table II-1), [www.imf.org].

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[1] FCL is Flexible Credit Line that was designed to meet the increased demand for crisis-prevention lending from countries with strong economic fundamentals. Countries can participate in this programme before they face crisis [www.imf.org].

[2] PCL is Precautionary Credit Line that was designed to meet countries' crisis-prevention needs [www.imf.org].

**Table 2. An approval of IMF loan programmes, 1953–2011
(in millions of SDRs)**

Period	Stabilization programmes				Structural programmes		Total
	SBA	EFF	FCL	PCL	SAF	ESAF/ PRGF	
1953–1959	3469	0	0	0	0	0	3469
1960–1964	6148	0	0	0	0	0	6148
1965–1969	6218	0	0	0	0	0	6218
1970–1974	4913	0	0	0	0	0	4913
1975–1979	8051	1895	0	0	0	0	9946
1980–1984	20520	22692	0	0	0	0	43212
1985–1989	14117	1277	0	0	1455	955	17804
1990–1994	14974	14479	0	0	130	3309	32892
1995–2000	83250	35659	0	0	182	6961	126052
2001–2005	96836	785	0	0	0	5769	103390
2006–2011	102965	20156	152492	413	0	4920	280946

Source: IMF Annual Report 2000 (Appendix II, Table II-1), IMF Annual Report 2010 (Appendix II, Table II-1), IMF Annual Report 2011 (Appendix II, Table II-1), [www.imf.org].
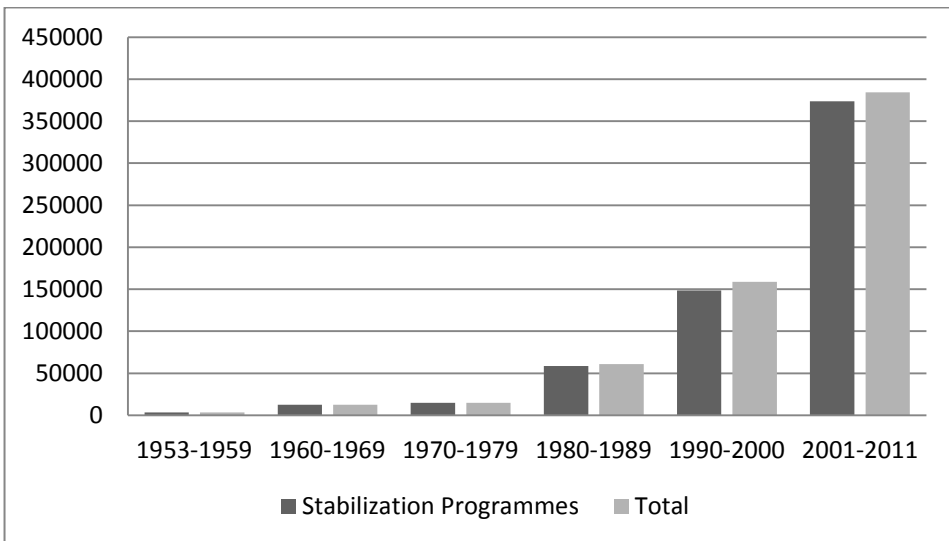
Figure 1. Values of IMF loan programmes, 1953–2011 (in millions of SDRs)

Source: based on data from Table 2.

The impact of IMF stabilization programmes on an economy of a supported country was a subject of a lot of empirical studies.

A SURVEY OF EMPIRICAL STUDIES ON THE EFFECT OF IMF PROGRAMMES
ON OUTPUT GROWTH

There are different approaches to the measuring of the effect of IMF loans on economic growth. Some of researches compare economic growth that a given country experiences in three periods: before, during and after the programme participations (the before-after tests). Other economists study the differences in output growth between countries participating and not participating in IMF programmes (the with-without tests). However most of analyses is based on regression-approach [Binder, Bluhm, 2010].

The empirical evidence regarding the effect of the IMF stabilization programmes on economic growth is mixed. Some studies report no effect. For example the results of before-after tests of the change in growth are almost unanimous that the IMF programmes are not associated with any significant change in the growth rate, positive or negative [Killick et al., 1990, p. 13]. Other empirical studies show that growth declines at the beginning of participation in IMF loans and later the negative effects diminish.

In the 1950s, opponents of tight monetary controls that was recommended by the IMF argued that these policies lead to a reduction of growth. In the 1980s some studies showed that IMF programmes have no negative consequences for economic growth [Vreeland, 2003, p. 3]. Statistically significant beneficial effect of IMF programmes on output growth during 1986–1991 was confirmed by Dicks-Mireaux, Mecagni and Schadler [2000, p. 495]. However, in this case the researches concentrated on ESAFs.

In turn, Bird [1994, p. 490] claims that the IMF policy recommendation are generally inappropriate for developing countries where payments difficulties are caused by structural deficiencies.

According to Przeworski and Vreeland [2000, p. 385] programme participation lowers growth rates for as long as countries remain under programme. Once countries leave the programme, they grow faster than if they had remained, but not faster than they would have without participation. The same conclusions are repeated in Vreeland [2003].

Barro and Lee [2005, p. 1247] in order to evaluate the impact of IMF loans on economic growth used political economy variables as instruments. The authors find that a greater IMF loan participation has a direct negative effect on economic growth. The more participation and larger loans also tend to decrease investment and have small negative effects on democracy and the rule of law. In consequence these channels provide a further negative influence of IMF stabilization programmes on output growth.

Barro and Lee [2005, p. 1268] give some possible explanations why countries borrow money form the Fund although the participation in loan programmes is bad for their economic growth. According to the authors the IMF lending may:

- lower real GDP but raise a country's income,
- lower growth in the short run but raise it in the long run,
- be good for the governments and politicians who arrange the lending.

In IMF programmes the economic growth objective is subordinate to balance of payments goals. Generally it is assumed that favourable effects of internal and external equilibrium are significantly greater than potential income losses [Yotzov, 2001, p. 11].

CONCLUDING REMARKS

The IMF provides financial support to countries which have problems with internal and external stability. For this purpose the Fund developed various stabilization programmes.

The basis of these programmes are the Polak model on monetary programming and its extended versions. The standard Polak model mainly focuses on the domestic credit creation. It shows the relationship between the rate of domestic credit creation and a target improvement in the balance of payments. Generally, the IMF stabilization programmes require the use of tight monetary and fiscal policies.

During period 1953–2011 a lot of countries participated in IMF programmes. Over the period, the amount of approved IMF loans increased significantly.

There are numerous empirical studies that focus on the impact of IMF's stabilization programmes on output growth in supported countries. However, most of them show that the participation in IMF loan programmes reduce or have negative impact on the output growth at least in short-run.

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Summary

The primary role of the IMF is to support the members when they have problems with balance of payments disequilibrium. For this purpose IMF developed various stabilization programmes that are based on the monetary approach to the balance of payments. A country can participate in IMF loan when it realizes tight monetary and fiscal policies.

During period 1953–2011 a lot of countries participated in IMF programmes and the amount of approved IMF loans increased exponentially.

There are a lot of empirical studies that focus on the effect of IMF's stabilization programmes on output growth in supported countries. Most of them show that the participation in IMF loan programmes reduce or have negative impact on the output growth at least in short-run.

Wpływ programów stabilizacyjnych na wzrost gospodarczy

Streszczenie

Kraje, które mają zachwianą równowagę bilansu płatniczego mogą skorzystać z pomocy finansowej Międzynarodowego Funduszu Walutowego (MFW). W tym celu MFW uruchomił różne programy stabilizacyjne, których podstawę stanowi monetarystyczny model bilansu płatniczego. Kraje, które uzyskują finansowe wsparcie od MFW zobowiązują się realizować restrykcyjną politykę fiskalną i pieniężną w trakcie trwania kredytu.

W latach 1953–2011 bardzo dużo krajów uczestniczyło w programach stabilizacyjnych MFW, a kwota udzielonych pożyczek rosła w sposób wykładniczy.

Wielu ekonomistów badało wpływ programów stabilizacyjnych na wzrost gospodarczy krajów, które korzystają ze wsparcia MFW. Z większości badań empirycznych wynika, że przynajmniej w krótkim okresie uczestnictwo w programie stabilizacyjnym ma niekorzystny wpływ na stopę wzrostu gospodarczego. Następuje spowolnienie wzrostu lub wręcz jego zahamowanie.