

# FINANCIAL SYSTEMS BALANCE OF PAYMENT AND ECONOMIC DEVELOPMENT

Hansjörg Herr

## 1. Introduction

The wave of globalisation over the last decades finds its centre in the international financial system. The deregulation of financial markets led to an enormous amount of new innovations and an explosion of international capital flows. Deregulation of financial systems started in the developed world in the 1970s. However, with a time lag most developing countries and later the countries of the former Soviet block liberalised their domestic financial systems (for example switching to market determined interest rates and allowed foreign currency deposits in the domestic banking system) and at the same time reduced or eliminated capital controls (for example allowing domestic firms to take credits abroad and households to keep bank accounts, debt securities or shares abroad). The question is whether these changes increased the chances for developing countries to catch up quickly or whether development becomes more difficult under the now existing conditions.

Robert Lucas (1988) believing in the neutrality of money argued that the relation between financial and economic development is "over-stressed". Joan Robinson (1952), more surprisingly, argued that financial development passively follows economic growth. However, she supported a Keynesian tradition which underestimates the role of money. Keynesian economics without money is, how Jan Kregel (1985) put it, like Hamlet without the prince. In this essay money and the financial systems are considered of key importance for economic development in both developed and developing countries. Also the World Bank (2001) strongly supports the belief that financial systems are of paramount importance for economic development. A positive development of financial markets is empirically a good predictor for future economic growth (cp. King/Levine 1993). The World Bank stresses supply side and productivity effects of financial systems. "Therefore, the contribution of finance to long-term growth is to improve the economy's total factor productivity rather than the quantity of capital." (World Bank 2001, 41). Productivity increases as a more developed financial system leads to a better allocation of financial funds, allows the collection also of small sums of savings, involves a broader risk dispersion, improves governance structures in enterprises, offers more venture capital etc. Although many of the points mentioned can be supported, the role of finance cannot be captured adequately if it is considered merely as an improvement of total factor productivity or a quasi-technical progress.

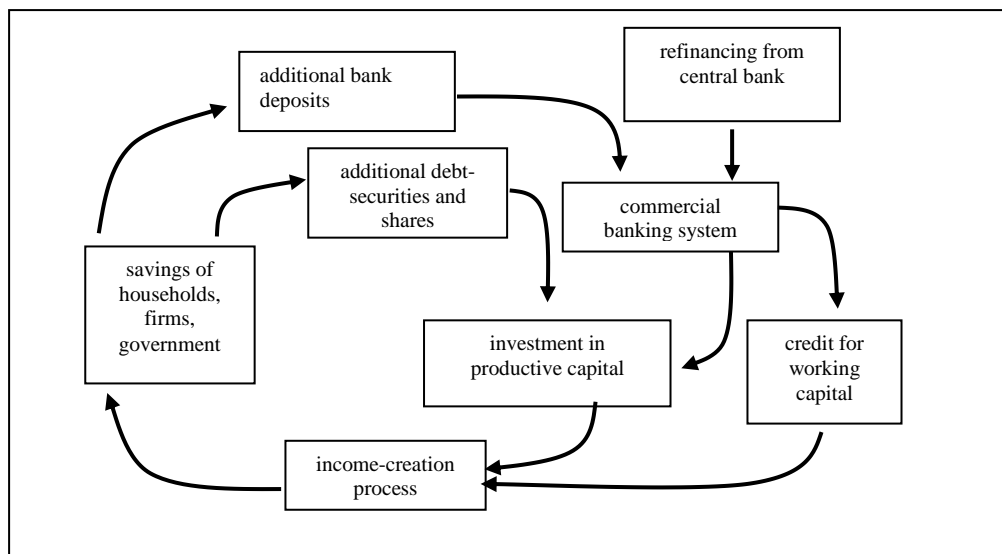
In what follows an interpretation between financial systems and development in a monetary oriented Keynesian tradition is given. The second chapter deals with the possibility to tap foreign financial markets to finance development. The risks of such a strategy, notably boom-bust cycles and Dutch disease, are discussed in the chapter. The last chapter gives a short conclusion.

## 2. Schumpeterian-Keynesian approach to finance and development

It was Schumpeter (1911) who argued that development is only possible if innovative entrepreneurs get credit created *ad hoc* (in the German original "out of nothing") to invest: "Our second thesis now runs: in so far as credit cannot be given out of the results of past enterprise or in general out of reservoirs of purchasing power created by past development, it can only consist of credit by means of payment created *ad hoc*, which can be backed neither by money in the strict sense nor by products already existing. It can indeed be covered by other assets than products, that is by any kind of property which the entrepreneur may happen to own. But this is in the first place not necessary and in the second place does not alter the nature of the process, which consists in creating a new demand for, without simultaneously creating, a new supply of goods." (Schumpeter 1911, 106). Keynes also argued along these lines: "The ex-ante saver has no cash, but it is cash which the ex-ante investor requires. (...) If there is no change in the liquidity position, the public can save ex-ante and ex-post and ex-any-thing-else until they are blue in the face, without alleviating the problem in the least." (Keynes 1937a, 665f.; cp. also Keynes 1937b).

What is necessary for economic development is *new* credit created first and foremost by the banking system. Saving in such an approach will be created out of the new income stimulated by investment. In Diagram 1 such a process is shown (cp. Herr/Priewe 2008). It starts when the banking system gives new and additional credit to firms to invest. Banks do not need additional financial funds or even saving to give additional credits. With the help of the central bank, commercial banks can create additional credit "out of nothing". The act of credit creation leads automatically to the creation of additional monetary wealth as a banking system simply gives credits by increasing its deposits. The vital point is that additional credit leads to additional investment. Investment is the link between the asset market and the goods market. Investment creates demand, additional capacity, production and employment, and also additional income in form of wages and profit. What we see here is a credit-investment-income-saving mechanism. The process is started by credit and investment and income and savings are the result. (Part) of the created deposits flow to households via income. Savings are kept by the population as cash, bank deposits or deposits given to entrepreneurs via the capital market. Banks can start to give additional credits to let the circuit of investment and income start again. Usually banks are needed as "circuit starters" for investment and production (cp. Bossone/Sarr 2002), however, the central bank has to accommodate an expansion process by money creation as part of central bank money will trickle away in a additional cash holdings of the public and additional reserve holdings of banks.

**Diagram 1: The credit-investment-income process**



Of course, finance is not the only factor needed to create development. For example, also entrepreneurs must exist to invest in productive activities. Economic expansion can be inflationary if demand becomes too high and a demand driven inflation triggers a wage-price spiral. Under conditions of full capacity utilisation and low unemployment inflation can become a problem. As inflationary processes are inherently unstable and lead to the danger of cumulative developments central banks must fight against inflationary processes. In such a situation the central bank does not become a circuit starter, it becomes a circuit stopper as restrictive monetary policy will lead to a slowdown of demand, to lower credit and money expansion and to a reduction in GDP growth and employment (cp. Heine/Herr 2003).

### **3. Capital inflows and development**

Countries with distorted domestic financial systems with a lack of credit can tap foreign financial markets. Potential credit volumes are unrestricted and interest rates in New York, London or Frankfurt are lower than in domestic markets of many developing countries. In this chapter it will be argued that foreign credit can become a substitute for a lack of domestic credit, however, to tap foreign credit markets involves high risks of failure. Firstly, foreign credit in developing countries is nearly always denominated in foreign currency. Under the condition of high credit denominated in foreign currency any sharp depreciation increases the real debt burden of domestic debtors and leads to a simultaneous currency and banking crises (twin crises). Beside a low currency premium this is a second effect of a low quality of a currency. Eichengreen et al. (2003) called this fundamental disadvantage for developing countries, for example compared with the high foreign indebted USA, as "original sin" of low-quality currencies. Secondly, even without the danger of currency crises capital inflows may erode the competitiveness of developing countries and to long-run negative effects (Dutch disease).

### 3.1 Boom-bust cycles and twin crises

Since the deregulation of international capital flows in the 1970s the world economy experienced several global boom-bust cycles of capital flowing to developing countries and then suddenly flowing back creating twin crises (cp. Williamson 2005).<sup>1</sup> During the first boom phase in the second half of the 1970s capital flew mainly to Latin America as other parts of the developing world still used capital controls. During the bust phase in the early 1980s inflows halved as investors were shocked by the Latin American debt crisis which started in 1982 in Mexico and spread to nearly all countries in Central and South America. About one decade later, in the early 1990s, a new huge wave of capital flooded the group of developing countries. During this time most of the capital swept into Asian and transition countries which had opened their capital accounts. The so called Tequila crisis in Mexico in 1994 brought only a short interruption of this boom phase. This boom phase came to a violent end in 1997. It started not much noticed in the former Czechoslovak Republic in spring 1997 and escalated later in the year in Thailand, South Korea, Malaysia and Indonesia. The Russian crisis followed in 1998. After a long struggle Argentina, a sweetheart of the IMF during the 1990s, fell into a crisis in 2001 as well as Turkey. During this bust phase capital flows to developing countries halved again – as one decade before. In 2003 a new wave of increasing capital flows to developing countries started. All these crises, and only the big ones are mentioned here, led to disastrous twin-crises and in some cases nearly wiped out the domestic financial system.

Any boom-bust cycle is unique and depends on many specific historical factors. However, a typical pattern can be given. Boom-bust cycles are expectation driven. The boom phase takes place on basis of high confidence of foreign and domestic economic agents in the economic development in the developing country. FDI and portfolio inflows increase as foreign investors expect high returns. Domestic banks and other financial institutions go abroad to get additional financial means for expanding credit. In addition, at least bigger firms directly can go abroad to take bank credits or issue debt-securities. Foreign creditors, usually foreign banks, unhesitatingly give credit to developing countries in such a situation as they also believe in the positive development of the debtor country. Investors can become too optimistic and retrospectively even irrational. Not necessarily but in many cases the wave of capital inflows started shortly after countries liberalised their capital accounts. For some years capital import countries show a good economic performance with high credit expansion, high investment, high GDP growth and positive employment effects. Some of the foreign investors, especially those giving credits and buying bonds, may speculate that governments, the IMF or other international institutions bail out over-indebted countries. Other factors also come into play. Waves of capital inflows add to an asset price bubble typically already existing.

The wave of capital inflows create a higher and higher economic fragility. Firstly, net capital inflows lead to current account deficits. For countries with fixed exchange rates increasing current account deficits are easy to finance. Capital imports may also lead to an appreciation and a

---

<sup>1</sup> The poorest developing countries are largely excluded from such cycles as they rely on donors and cannot attract substantial private capital inflows.

cumulative increase of current account deficits. Secondly, foreign debt in relation to GDP increases as part of the current account deficits is financed by credits. It has to be kept in mind that some of the capital inflows finance capital outflows and it is the gross debt in foreign currency including credit dollarisation which is important for the real debt burden in case of a later depreciation. The higher share of net FDI inflow and net portfolio equity inflow in the last boom cycle (cp. Diagram 1) is an improvement of the structure of inflows for developing countries, it would, however, be an illusion to assume that a future bust phase can avoid twin crises. Gross foreign debt and credit dollarisation still is alarmingly high in developing countries. Thirdly, asset prices increase to irrational levels and make a later destructive asset price deflation more and more likely. If a central bank starts to increase interest rates to fight against inflationary developments a dilemma is created: The harder a central bank in such a situation increases interest rates or tries to reduce domestic credit expansion by administrative means the higher the incentive of domestic agents to circumvent restrictive monetary policy by taking credit abroad.

The pitcher goes often to the well, but is broken at last. Even small changes in expectations can lead to portfolio shifts which are difficult to manage for the country. There may be a political shock as in Mexico in 1994 to trigger a currency crisis; there may be the fear by foreign investment funds that asset markets and the external value of a currency will collapse as in Thailand 1997; there may be contagion effects as in Malaysia or South Korea in 1997; and there may be no good explanation at all for the change in sentiments. In all currency crises foreign and domestic wealth owners want to secure their wealth and prefer to keep it in high-quality currencies. A change in expectations leads to a negative conventional judgement which implies depreciation expectations and a collapse of the currency premium. Economically costly twin crisis which can lead to long-term stagnation and a change in the long-run growth path characterize the bust phase.<sup>2</sup>

### **3.2 Capital inflows and Dutch disease**

When in the 1960s the Netherlands discovered large offshore natural gas deposits this had negative effects for its manufacturing sector. The export of gas led to a real appreciation of the Dutch guilder and a shrinking of manufacturing. This economic effect was called "Dutch disease". The same argument applies to development aid which also can crowd out the manufacturing export sector: "In sum then, the bad news is that even if delivered with the best intentions and used carefully by responsible recipient governments, there are side effects like adverse impacts on competitiveness, which can offset aid's beneficial effect on growth." (Rajan/Subramanian 2005, 8). The argument is that aid inflows may be spend for domestic goods – building schools or give money to the poor who buy domestic goods –; in this case the price level of non-tradable goods

---

<sup>2</sup> Williamson (2005, 15 ff.) exemplarily calculated the costs of the Asian crisis in 1997. The cumulative loss of one year's GDP from 1997 until 2000 was 82% in Indonesia, 27% in South Korea, 39% in Malaysia und 57% in Thailand. According to IMF estimations costs of bank restructuring in percent of GDP were 32.5% in Indonesia, 19.5% in Korea, 19.3% in Malaysia und 25.0% in Thailand. In all four countries in 2003 unemployment rates were still higher than in 1997. Also the population living under the national or international poverty line increased after the Asian crisis. The Asian crisis in 1997 also shows that economic development is path dependent. South Korea, for example, was able to overcome the crisis relatively quickly. In Indonesia the crisis was much deeper and longer and pushed the country on a medium-term growth path which is lower than before the Asian crisis.

goes up; and the resulting real appreciation leads to a flow of resources from the export sector to the non-tradable goods sector and a shrinking export sector. For example, skilled workers move from the export sector to increase production in the non-tradable goods sector. As the export sector is exposed to international competitiveness it is usually considered to be the sector with the highest productivity increases. Thus, any reduction of the export sector is harmful for the long term development of developing countries. Empirical studies of the aid related Dutch-disease effect do not come to clear conclusions. However, there is no doubt about the potentially high negative side effects of development aid (cp. Adam/O'Connell 2004; Adam 2006; Rajan/Subramanian 2005; Hoffmann/Zattler 2006).

The argument can be transferred to private international capital flows as any type of net capital inflow can potentially lead to appreciation and Dutch disease effects. In what follows different typical cases of net capital inflows are analysed. In many analyses of Dutch disease Say's law is considered to hold. Here effective demand becomes a decisive factor to determine output and employment and also for Dutch disease effects.

- a) In the first case increases in net capital inflows are neutralised by central bank interventions which create "artificial" compensating capital export. Under the assumption of successful sterilisation the nominal and real exchange rate do not change and there is no negative demand effect and no Dutch disease. Positive is that central bank's reserves increase.
- b) In the second case increases in net capital flows lead to additional imports of goods which cannot be produced domestically and at the same time do not crowd out domestic demand and production. Let us say capital imports are used to import consumption goods which were not available in the country before and are consumed additionally. There is no change in the exchange rate, no change in domestic demand and no change in domestic production. Or let us assume capital imports are used to import capital goods which are not available before and do not crowd out domestic investment. Domestic capacities increase in this case. However, without additional domestic demand there will be no additional output. Imported capital goods may lead to higher domestic productivity, what is positive, but also higher productivity does not automatically increase domestic demand and production.
- c) The third case is a special version of the second case. Let us assume a situation of excess domestic demand and physical bottlenecks to increase production. Under such a condition net capital inflows and a resulting inflow of needed capital or intermediate goods increase domestic production. This special case fits to the traditional World Bank model (cp. Chenery/ Strout 1966) and to the believe of many other international institutions and development ministries. It is based on the assumption that developing countries have a lack of domestic savings and of physical capital, and that foreign savings and a deficit in the current account should augment domestic saving and increase the domestic capital stock. China, which in 1978 definitely was not a country with a good and abundant capital stock, does not support this idea. It developed without current account deficits and followed immediately an export-led development. Easterly (1999) tested the saving gap

model. From the 138 developing countries he tested only one country (Tunisia) supports the saving gap model. In all other cases sometimes very high net capital inflows could not trigger development.

- d) In the fourth case net capital imports are used to finance domestic demand. There are again two sub cases. In the first sub case firms, public households etc. switch from domestic finance to foreign finance without increasing domestic demand. Here we have a clear reduction in domestic demand as the capital import leads to an appreciation and a reduction in exports and/or an increase in imports exactly equal to the additional capital import. In the second sub case capital imports are used to increase domestic demand. Here we have an appreciation and thus a reduction of demand equal to the net capital import, however, this loss of demand is compensated by additional domestic demand. The overall effect is zero.

The conclusion of this part is that under very special conditions – insufficient physical domestic capital stock to produce more *and* sufficient domestic demand – capital inflows can increase domestic production. In many other cases net capital inflows lead to no increase of domestic production or even to damaging Dutch disease effects.

#### **4. Conclusion**

World financial markets are more integrated than ever. However, the market is divided in different currency segments. At the top of the currency hierarchy are currencies like the US dollar, the euro, the Japanese yen or the British pound which dominate international financial markets. At the bottom of the hierarchy are the currencies of developing countries. In many cases these currencies only partly take over domestic currency functions. They usually are used for domestic transaction purposes but do not serve as a store of wealth to be transferred in the future. Compared with top currencies these currencies earn a low currency premium and are confronted with dollarisation as well as capital flight in hard currencies. The relatively low quality of these currencies is one of the most important hurdles for development – probably much more than the usually stressed lack of physical capital, technology, skills of workers etc. It prevents a domestically financed Schumpeterian-Keynesian credit-investment-income process as a large part of domestic monetary wealth during such a process is exchanged in foreign currency, triggers depreciation and leads to extremely tight macroeconomic monetary budget constraint which suppresses development.

Strategies to increase the quality of the national currencies are of paramount importance for economic development. There are several conditions which must be fulfilled to achieve this goal. Firstly, macroeconomic monetary stability must be realised; especially inflation rates must be low and depreciations limited. Secondly, a very successful policy to increase the quality of domestic currencies is to prevent current account deficits and high foreign debt. Increasing exports together with current account surpluses do not only stimulate domestic demand and trigger export-led growth, they also reduce the likelihood of twin crises and thus stabilise expectations in the stability of the domestic financial system and the domestic currency. The group of developed countries should accept current account deficit to allow the group of developing countries to have current

account surpluses. Such a policy would improve the conditions for development of developing countries and would be much more efficient as many types of developing aid which stimulate domestic export of developed countries and can lead to Dutch disease effects in developing countries. Thirdly, measures to reduce dollarisation are needed. Fourthly, regulations can support and protect a domestically financed development process. Traditional capital export controls can be used here as well as, for example, the restriction of domestic banks, pension funds etc. to invest abroad.

To substitute a domestic accumulation process in domestic money with a foreign financed accumulation process is theoretically under certain conditions possible. The most important ones are the creation of sufficient domestic demand in spite of the demand reducing current account deficits, long-term stable capital inflows and successful measures against Dutch disease effects. In too many cases the attempt of create sustainable development via net capital inflows and current account deficits failed and ended in twin crises and a perpetuation of underdevelopment.

Against the background it is no surprise that there seems to be no empirical relationship between capital account liberalisation and economic performance. It seems clear that quick and comprehensive liberalisations of capital accounts add fundamentally to instability and crises and not to stable development (cp. Stiglitz 2000 and 2004; Rodrik 1998 and 2001; Diaz-Alejandro 1985). This argument does not imply that a country should stay completely isolated from international capital markets. Certain types of FDI and other capital flows can support economic development. A superior strategy seems to be to combine some selected FDI inflows and restrictions of other types of capital inflows with current account surpluses. Central bank interventions are an important and legitimate strategy for developing countries to prevent current account deficits. Such interventions and other controlled capital exports can compensate FDI inflows and stabilize current account surpluses.

## **Literature**

Adam; C. (2006): Exogenous Inflows and Real Exchange Rates. Theoretical Quirk or Empirical Reality, in: Isard, P., Lipschitz, L., Mourmouras, A., Yontcheva, B. (eds.): *The Macroeconomic Management of Foreign Aid. Opportunities and Pitfalls* 171 - 193.

Adam, C., O'Connell, S. (2004): Aid versus Trade Revisited: Donor and Recipients Policies in the Presence of Learning-by-Doing, in: *Economic Journal*, 114, 150-173.

BIS (Bank for International Settlement) (2006): *Quarterly Review*, September, Basle.

Bossone, B., Sarr, A. (2002): *A New Financial System for Poverty Reduction and Growth*. International Monetary Fund, Working Paper 02/178, Washington D.C.

Chenery, H. B., Strout, A.M. (1966): Foreign Assistance and Economic Development, in: *American Economic Review*, 56, 679-733.



- De Nicoló, G., Honohan, P., Ize, A. (2003): Dollarization of the Banking System: Good or Bad?, IMF Working Paper 03/146, Washington D.C.
- Diaz-Alejandro, C. F. (1985): Goodbye Financial Repression, Hello Financial Crash, in: *Journal of Development Economics*, 19, 1 - 25.
- Easterly, W. (1999): The Ghost of the Financial Gap. Testing the Growth Model Used in the International Financial Institutions, in: *Journal of Development Economics*, 60, 423-438.
- Eichengreen, B., Hausmann, R., Panizza, U. (2003): Currency Mismatches, Debt Intolerance and Original Sin. Why They Are Not the Same and Why It Matters. National Bureau of Economic Research, Working Paper 10036, Cambridge, MA.
- Heine, M., Herr, H. (2003): *Volkswirtschaftslehre. Paradigmenorientierte Einführung in die Mikro- und Makroökonomie*, 3<sup>rd</sup> ed., (Oldenbourg: München).
- Herr, H. (2008): Capital Controls and Economic Development in China, in: Arestis, P., De Paule, L.F. (eds.): *Financial Liberalisation and Economic Performance in Emerging Markets* (Cheltenham: Edward Elgar).
- Herr, H., Priewe, J. (2008): *The Macroeconomics of Development and Poverty Reduction. Strategies Beyond the Washington Konsensus*, 2<sup>nd</sup> ed., (Baden-Baden: Nomos).
- Hoffmann, M., Zattler, J. (2006): Mitigating the Risks of Increased ODA Flows, in: *Internationale Politik und Gesellschaft*, 2/ 2006, 27 – 42.
- Keynes, J.M. (1921): *A Treatise on Probability*, Vol. 8 of the *Collected Writings of John Maynard Keynes* (London: Macmillan 1973).
- Keynes, J. M. (1936): *The General Theory of Employment, Interest and Money*, Vol. 10 of the *Collected Writings of John Maynard Keynes* (London: Macmillan 1973).
- Keynes, J. M. (1937a): The 'Ex-Ante' Theory of Interest, in: *The Economic Journal*, 47, 663-669.
- Keynes, J. M. (1937b): Alternative Theories of the Rate of Interest, in: *The Economic Journal*, 47, 241-256.
- Keynes, J.M. (1937c): The General Theory of Employment, in: *The Quarterly Journal of Economics*, 51, 209-223.
- King, R.G., Levine, R. (1993): Finance and Growth: Schumpeter Might be Right, in: *Quarterly Journal of Economics*, 108, 717 –737.
- Kornai, J. (1980): *The Economics of Shortage*, (North-Holland: Amsterdam).
- Kregel, J. A. (1985): Hamlet without the Prince: Cambridge Macroeconomics without Money, in: *American Economic Review*, 75, 133 – 139.
- People's Bank Of China (2006): *Quarterly Statistical Bulletin*, different years.

- Lau, R. W.K. (2000): Privatisierung in China, in: PROKLA. Zeitschrift für Kritische Sozialwissenschaft, 30, 240-265.
- Lucas, R. E., Jr. (1988) : On the Mechanics of Economic Development, in: Journal of Monetary Economics, 22, 3-42.
- Naughton, B. (2007): The Chinese Economy. Transition and Growth (Cambridge, MA: MIT Press).
- Prasad, E., Wei S. J. (2005): The Chinese Approach to Capital Inflows; IMF Research Department, Washington, D.C.
- Rajan, R.G., Subramanian A. (2005): What Undermines Aid's Impact on Growth. IMF Working Paper 05/126, Washington, D.C.
- Robinson, J. (1952): On Generalisation of the General Theory, in: The Rate of Interest and Other Essays (London: Macmillan).
- Rodrik, D. (1998): Who Needs Capital-Account Convertibility? Essays in International Finance, No. 207.
- Rodrik, D. (2001): Development Strategies for the Next Century, in: Pleskovic, B. Stern, N. (eds.), Annual World Bank Conference on Development Economics 2000, Washington DC.
- Schumpeter, J. (1911): The Theory of Economic Development, English translation (1934) (Cambridge, MA: Harvard University Press).
- Stiglitz, J. E., Uy, M. (1996): Financial Markets, Public Policy, and the East Asian Miracle, in: The World Bank Observer, 11, 249-276.
- Stiglitz, J.E. (2000): Capital Market Liberalization, Economic Growth and Instability, in: World Development, 28, 1075-1086.
- Stiglitz, J.E. (2004): Capital-Market Liberalisation, Globalisation, and the IMF, in: Oxford Review of Economic Policy, 20, 57- 71.
- Williamson, J. (2005): Curbing the Boom-Bust Cycle: Stabilizing Capital Flows to Emerging Markets. Institute for International Economics, Washington DC.
- World Bank (2001): Finance for Growth (Oxford: Oxford University Press).
- World Bank (2007): World Development Report (Oxford: Oxford University Press).