Foreign Direct Investment: A Focused Literature Review

Olafur Margeirsson

Research Scholar, Global Institute for Sustainable Prosperity

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Abstract

Foreign Direct Investment, FDI, is often, it is argued, one of the ways developing economies have to develop faster and catch up with developed economies, from which most of the FDI activities come from. There are complications, however, and FDI can have various unforeseen and even unfavourable consequences for the economy. As such, it is vitally important for policy makers to understand those limitations and potential effects of FDI, especially in the context of sustainable economic development: FDI is a double-edged sword that must be handled with care. The following paper offers an introduction to the literature of the subject with some thoughts of the author regarding some of the potential consequences of FDI. Special emphasis is on four aspects: FDI and economic growth, FDI and other capital flows, FDI and the balance of payments and FDI and financial stability.

Keywords: Foreign Direct Investment, Economic Growth, Capital Flows, Balance of Payments, Financial Stability

JEL codes: F21, F23, F63
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Introduction

[Foreign] direct investment is a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy... Immediate direct investment relationships arise when a direct investor directly owns equity that entitles it to 10 percent or more of the voting power in the direct investment enterprise (IMF 2011, 100-101).

The definition of FDI comes from the International Monetary Fund: 10% ownership or more of a foreign party in a domestic corporation. This distinguishes FDI from other capital flows such as portfolio flows which are “defined as cross-border transactions and positions involving debt or equity securities, other than those included in direct investment or reserve assets” (IMF 2011, 110).

It is Multinational Corporations (MNC) – defined by Encyclopædia Britannica (Encyclopædia Britannica 2013) as “a corporation that is registered and operates in more than one country at a time” – that mainly carry out FDI projects which can be, in general terms, either horizontal or vertical.

Horizontal FDI is when the whole production process is copy-pasted between economies, the production facilities are set up with the aim of servicing that specific economy. Horizontal FDI is therefore often used instead of exports to get past trade barriers such as import tariffs (Helpman, Melitz & Yeaple 2003). Vertical FDI on the other hand is where the production process is broken down in stages between economies. Each economy takes care of only a part of the whole production process of the relevant good and the outputs are then transported to their final assembling place. Vertical FDI can be used to gain from international differences in price of inputs, such as labour (Helpman 1984), although the empirical records for this proposition are mixed (Braconier, Norbäck & Urban 2005).

Worldwide FDI has grown significantly in the last decades. In 2012, nearly $1.4 trillion flowed out of the world’s economies, first and foremost from developed ones.

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1 The full definition: “multinational corporation (MNC), also called transnational corporation, [is] any corporation that is registered and operates in more than one country at a time. Generally the corporation has its headquarters in one country and operates wholly or partially owned subsidiaries in other countries. Its subsidiaries report to the corporation’s central headquarters.”
The main destination of those funds was, for the first time, not the developed economies themselves but developing economies.

However, although the developing economies were in 2012 the main receivers of FDI flows, the inward stock of FDI is mainly concentrated in the developed economies of the world (figure 3). In fact, at the end of 2012, 62% of the world’s FDI was stationed in developed economies. At the same time, almost 80% of world’s FDI originated from those same economies (figure 4).

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2 Data comes from United Nations Conference on Trade and Development, UNCTAD. They are reflated with the CPI of USA (data from OECD) in an attempt to show the data on a stable-price basis (author’s calculations). This applies to figures 1.1 – 1.4.
Getting into the general characteristics of FDI, Markusen (2002) provides a taster list. According to Markusen, there are 13 points to be made:

1. FDI flows have increased substantially. Consequently, so have the stocks of FDI. We see from the figures above that since Markusen’s article, this development has continued.

2. FDI flow has historically been to a large extent between developed countries but not from rich countries to poor. This is “The Lucas Paradox” (Lucas 1990). However, Fajgelbaum, Grossman, and Helpman (2011) show that this “paradox” can be explained by the Linder hypothesis (Linder 1961): like trade, FDI between economies is related to similarities in demand-preference structures which again hinge to a large extent on the level of income in the economies. Building on this hypothesis, we
can speculate that the reason why developing economies are getting a larger share of the global FDI flows than before is because their demand structure, due to e.g. higher income, has become more similar to the one in developed economies where most of the FDI flows from.

3. Pairs of developed countries have commonly large FDI flows between them, even within the same industry.

4. Most of FDI seems to be horizontal although this observation depends on how “thick” each stage of the production process of goods and services is defined. Thinly defined production stages lead us to conclude that many subsidiaries of multinational corporations produce very specific inputs for another company in the overall production process (Alfaro & Charleston 2009). In other words, horizontal FDI can be considered vertical FDI if the definition of a stage of the production process is made slimmer.

5. Intra-firm trade of MNCs stands behind a “large” share of total world trade. Intra-firm trade is a larger share of total trade in the case of rich economies than poor (Lanz & Miroudot 2011). FDI and trade do show some signs of having a positive causal relationship (Bajo-Rubio & Montero-Muño 2001; Dritsaki, Dritsaki, & Adamopoulos 2004; and Liu, Wang & Wei 2001).

6. In the light of how much of FDI is horizontal, it should not be surprising that FDI seems to be positively correlated with labour skills in the host economy. This has been empirically confirmed and the human-capital variable seems even to have become more important than before (Noorbakhsh, Paloni & Youssef 2001).

7. Political unrest and instability scare off potential foreign direct investors (Schneider & Frey 1985). Corruption correlates negatively with FDI inflows (Habib & Leon 2002) and democracies attract more FDI than autocracies (Guerin & Manzocchi 2009; Jensen 2003). Generally, uncertainty about political policies and the commitment to property rights has a negative impact on foreign direct investment (Henisz, Mansfield, & Glinow 2010).

8. FDI is not prominent in all industries. Within the OECD countries, at year end 2011, 52% of inward FDI positions were in services, of which financial intermediation represented 20% of the total FDI inward positions. At the same time, FDI inward positions in agriculture and fishing hardly registered (0.1% of total FDI inward positions).

9. FDI is prominent in industries
   a. where research and development is important
   b. where demand for skill-abundant labour is high (high ratio of professionals compared to total workers)
   c. in which high-tech goods and services are produced and sold. This generally applies to any “high-tech” good at all, let it be something tangible or not. In this manner e.g. a legally complicated good or service may be considered “high-tech” since it needs a professional (a lawyer) to be produced. Financial services are another example. This underlines point b.

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3 According to Lanz and Miroudot (2011) it is unclear how large exactly, both due to lack of data and the definition regarding what ownership level is needed to mark a trade transaction as “intra-firm”.

4 Data from the OECD online database, extracted 31 July 2013.
d. in which a wide range of products is sold and/or produced, with high level of advertising.

10. The value of intangible assets, as a proportion of the value of total assets, has the tendency to be higher in the case of firms carrying out FDI than in other firms.

11. FDI can lead to economies-of-scale that might be impossible to reach without the FDI activity, e.g. due to a small home market. This improves the use of resources but also makes it possible that FDI corporations may never become too large since, in that case, larger is better. Economies of scale in a multinational corporation can be achieved through the common use of e.g. advertising material, product design ("blueprint sharing") and cheaper per-unit cost of input, due to e.g. bulk discounts (Davidson 1980).

12. Generally, firms seem to have to grow up to a certain size before FDI becomes feasible. However, although most FDI, by value, is carried out by large MNCs the share of small and medium sized MNCs of total FDI grows significantly when looking at the absolute numbers of FDI projects (Fujita 1995).

13. Trade barriers can encourage FDI in the sense that companies will simply choose to carry out (horizontal) FDI rather than export to the host economy (Brainard 1993). The development of the 90s, perhaps especially in Europe with the progress of the single market, when freer trade and FDI increased at the same time, does not need to contradict this. That apparent paradox can be explained in two ways: non-EU countries enter the EU via FDI, and use the receiving country as an export hub to the rest of EU, and M&A activity over borders is encouraged as trade costs fall (Neary 2009).

In addition to this taster list it is important to explicitly link FDI to the subject of sustainable prosperity. FDI, having e.g. the ability to promote trade and technological development, can be one way for policy makers to encourage the economy to move towards the status of sustainable prosperity for the population as a whole. But as the following literature review reveals, the pitfalls are many – including, even, the possibility of the host economy being turned into a pollution haven which obviously works against the principle of sustainable prosperity including good health and enjoyable environment (see Erdogan (2014) for a recent survey on that particular topic).

It is not the plan to discuss here every aspect of the effects of FDI for that would be too large a task. For the purpose of this literature review, we will focus on merely four themes: FDI and economic growth; FDI and other types of capital flows; FDI and the balance of payments; and FDI and financial stability.

1. 

**FDI and Economic Growth**

One of the arguments for FDI is that it should increase economic growth in the host economy (Alfaro, Chanda, Kalemli-Ozcan, & Sayek, 2010; Mencinger 2003) and even be more effective in boosting economic growth than domestic investment (Borensztein, De Gregorio, & Lee 1998). The ways foreign direct investment should have positive effects on economic growth in the host economy are five, given the “appropriate host-country policies
and a basic level of development” (OECD 2002, 5): FDI facilitates the transfer of technological advances and know-how; it increases competition; human capital improves; it integrates the economy towards the world economy; and it pushes for more positive development of firms.

However, FDI can also negatively affect economic growth. Moura and Forte (2009) point out that although, as OECD (2002) states, there are five channels through which FDI can have positive effects on economic growth there are five channels through which FDI can have negative effects on economic growth. Four of them are the aforementioned channels mentioned by OECD through which FDI can positively affect economic growth, except the positive development of firms. Additionally to those four, FDI can also negatively impact the implementation of domestic economic policies. Furthermore, Mencinger’s (2003) study pointed out that funds raised through the FDI flows in the form of M&A activity can simply be spent on imports. Profit repatriation comes on top of that. This can have a negative impact on the balance of payments and, following Thirlwall’s Law, have a negative impact on the long term economic growth of the country. 5

Overall, FDI does seem to have positive effects on GDP growth (Moura & Forte 2009) although the effects may be questioned when it comes to their strength (Alfaro et al., 2010). But some evidences show that FDI does not always increase economic growth. In a recent paper, Ocaya, Ruranga and Kaberuka (2013) used Granger causality tests to test the relationship between FDI inflows into Rwanda and economic growth. They conclude that they are independent of each other. Mencinger (2003) looks at eight Central and East European Countries and finds a negative correlation between FDI and economic growth. Eller, Haiss & Steiner (2006) were stimulated by Mencinger and deduced that (p. 305) “FDI might not have an unlimited positive impact on growth, but presumably there is a certain threshold from which on negative effects [such as crowding out of domestic investment] dominate”6 – so more is not always better. They find this position holds in the case of financial sector FDI in nearly the same set of countries as Mencinger looked at.

The approach to the question seems to matter as well: microeconomic-level studies have the tendency, rather than macroeconomic-level ones, to find that FDI does not increase economic growth. Furthermore, the micro-level studies often find that the acclaimed spillovers between foreign and domestic firms do not seem to be prominent (Carkovic & Levine 2005). Other studies have said the supporting evidence for spillovers is “limited” (Görg & Greenaway 2003) and still others have pointed out that the causation link between FDI and economic growth may not necessarily be only from the former to the latter: economic growth can cause FDI to come into the economy and the causation may also run both ways (Chowdhury & Mavrotas 2006; Liu, Burridge & Sinclair 2002).

5 Thirlwall’s Law links together long term economic growth of a country to world economic growth and the income elasticity of demand for the country’s export and imports. Outflow of capital in the form of royalties to foreign corporations would decrease the long term economic growth of the country according to Thirlwall’s Law.

6 The answer to the question whether FDI crowds in our out domestic investment is inconclusive. Some research tilts towards the “out” answer (Agosin & Machado 2005; Mišun & Tomšk 2002) while other answer it with “in” (Mišun & Tomšk 2002) or that they cannot reject the hypothesis that FDI crowds out domestic investment (Kim & Seo 2003).
It seems that it is not enough to simply attract the FDI and expect it to have automatically positive effects on economic growth. Blomström, Lipsey & Zejan (1992) and Beugelsdijk, Smeets, and Zwinkels (2008) found that rich economies benefitted more from FDI than poorer ones. Gallagher and Zarsky (2006) simply put it “[t]he poorer the country, the more likely is the FDI impact negative.” Borensztein et al. (1998) show that FDI can have a negative impact on economic growth in countries with low level of human capital, a result they find “puzzling”. Somewhat similar effects seem to be in place in Alfaro et al (2010) and Choong (2012) where linkages are found between the development of the host economy’s financial system and the positive effects of FDI on economic growth: economies with more developed financial systems reap more benefits. This can help explaining the results of Blomström et al as rich economies have normally more developed financial systems.

Borensztein et al (1998) hold the position that the host economy must have an “absorptive capability” when it comes to absorbing the spillovers that the FDI brings: the application of more advanced technologies brought over by FDI projects calls for a sufficient level of human capital to use them, education being an important part of that factor. Therefore, if the capability to absorb the spillover – a sufficient quantity of human capital – is not in place, FDI is not effective in promoting economic growth. The quality of education matters as well (Wang & Sunny Wong 2011).

The education factor is not only a determining factor when it comes to the absorptive capabilities of the economy but it also stimulates more FDI to come into the country (Noorbakhsh et al. 2001). Institutions also matter: the better the institutions – especially property rights – the higher the FDI will be (Ali, Fiess & MacDonald 2010). The institutional factor can in fact be interpreted as a part of the “absorptive” capabilities of the host country and should therefore not be surprising in the light of Borenztein et al.

Also, how the FDI is done matters: the host country’s capital stock does not develop as much when the FDI is in the form of mergers and acquisitions compared to when a “Greenfield” investment – i.e. when the foreign corporation actually constructs the new facilities connected to the FDI instead of buying existing ones – takes place (Harms & Méon 2012). Given that capital stock is used in the production of goods and services we could expect economic growth to be lower in the wake of an M&A FDI activity compared to a Greenfield FDI activity. Wang and Wong (2009) found similar differences in the impact of FDI on economic growth depending on whether it was a Greenfield investment or M&A activity: the former encouraged economic growth while the latter only did if there was enough human capital in the host country prior to the FDI inflow. They also explain the ambiguity regarding the effects of FDI on economic growth with the explanation that in most FDI investigations there is no distinction made between Greenfield and M&A related FDI.

Mencinger’s (2003) study somewhat lends support to the view of Wang and Wong. According to him, mergers and acquisitions were the most prominent form of FDI into the sample of Central and East European Countries he had and the money so raised was used to finance imports and consumption rather than investment which would have had more
positive effects on economic growth. On top of the Greenfield/M&A factor comes the question of the sector in which the FDI takes place. FDI in primary sectors does not seem to have positive effects on economic growth while the opposite is the case when it comes to manufacturing. The results for the service sector are unclear (Alfaro 2003). Alfaro looked at 47 countries and later, Cifticioglu, Fethi and Begovic (2007) found supporting evidences for Alfaro’s view when they looked at nine CEE countries. They held the view that Alforo’s results were worth taking “seriously”.

A. Technological Spillovers and Growth

Technological spillovers and know-how is often quoted as one of the positive side effects of FDI as it should improve economic growth. The way this should happen is through quicker innovation and general improvements in the rate of development. Eaton and Kortum (1996) show, using a growth accounting approach, that within a sample of OECD countries most of innovation came from only three of them: USA, Japan and Germany. FDI, perhaps especially from these countries, should increase the level of technology in the host economy. These technological spillover effects have been empirically confirmed although there is a lack of consensus on how strong they really are and what determines them (Blomström, Globerman & Kokko 1999; Crespo & Fontoura 2007).

However, according to Moura and Forte (2009), technological spillovers can negatively affect growth through the host country becoming dependent on technologies introduced by the foreign firm. This dependency is linked to the fact that a “substantial” part of world’s research and development is done by international corporations (Borensztein et al. 1998). Why it should negatively affect economic growth is still unclear except in the case of royalties paid to the foreign firm for the use of their technology as Moura and Forte mention. This would negatively affect the balance of payments and therefore economic growth through Thirwall’s Law.

B. Increased Competition and Economic Growth

Dragging FDI into an industry with a low level of competition can be an incentive for other firms in the industry to innovate faster and lead to improved allocation of resources. Together it can lead to positive effects on economic growth due to FDI-fuelled competition (Fortanier 2007).

On the other hand, increased competition from a large and significantly more efficient international corporation can negatively affect economic growth through bankruptcies of domestic firms. Bankruptcies of domestic firms lead again to a more concentrated industry where the MNC dominates, possibly even monopolising the host economy’s market. That sort of monopolisation can lead again to economic rents, deterioration in the allocation of resources and a slow-down the rate of competition-induced innovation (Fortanier 2007). Somewhat contradictory, the entry of a foreign firm into the market can therefore, in the end, decrease the level of competition in the market.
However, the FDI activity of a foreign company in a particular industry can increase competition, and general development, in other industries in the host economy as well (Markusen & Venables 1999). The way this can happen is through “backward” and “forward” linkages with other industries. Backward links act through any inputs that the FDI industry needs, creating incentives for (domestic and foreign) firms to enter and develop the industry that produces that input. The forward link works if the output of the FDI industry is used as an input in another. The increased competition in the FDI industry and potential improvement of the produced good lowers the price and improves the quality of any goods that use it as an input.

Also, the presence of foreign firms may not only bring previously nonexistent know-how, which can spur growth of domestic firms in that same industry (Mottaleb & Sonobe 2011), but also be supportive in providing better inputs, which were previously unavailable or substandard, to that industry and even others (Lin 2012). Focusing on the FDI-receiving industry is therefore not enough when the competition effects of FDI on economic growth are analysed.

C. Labour Force and Economic Growth

FDI is one of the channels that can improve the level of human capital in the host economy, again through spillovers and on-the-job training (Ozturk 2007). Improving the human capital level, FDI can therefore boost economic growth.

The way FDI can have a negative impact on economic growth through the labour force is through the higher use of technology in FDI performing firms (Moura & Forte 2009). Such usage of technology can lead to layoffs, having potential negative impact on overall demand in the economy as wage income can decrease. Lack of demand can again lead to lower economic growth. The possible positive spillovers that FDI performers have on the level of human capital in the host economy are therefore potentially counterweighted by this decrement in demand for labour.

However, weighing against this come the effects on demand for labour if the FDI performer is carrying out investments in the economy, especially those that create new real-capital. Often, FDI is found to have a positive impact on employment levels (Subramaniam 2008) although its impact on job creation cannot be taken for certain (Seyf 2000). Furthermore, wages in foreign-owned companies have been found to be higher than in domestic firms (Griffith & Simpson 2003) although it is not certain that there is a causal relationship between higher wages and a foreign ownership, i.e. there may be correlation but causality is unclear (Martins 2004).

D. FDI, Trade and Economic Growth

FDI and trade can be either substitutes or complements. Vertical FDI where production of the good is split into stages is likely to stimulate trade while horizontal FDI is more likely to be a substitute for trade (Markusen & Maskus 2001). However, Neary (2009) points out that (horizontal) FDI and trade can go together if liberalization within trade blocs draws outside
companies to set up an affiliate in only one area of the trade bloc and export to the rest of it from there. Potential chances for increased economies of scale, resulting from a larger market as trade costs are eliminated, can also spur M&A activity across borders as companies seize new opportunities in sharing technologies and strengthening their place in the market. Collie (2011) uses a Cournot duopoly model to explain how trade liberalisation and increased FDI can increase at the same time. Horizontal FDI and trade are therefore not necessarily substitutes.

Increased trade caused by FDI can have a positive impact on economic growth (Makki & Somwaru 2004). But this channel can also negatively affect economic growth. A shock in one economy can translate into a lack of demand for another country’s exports or higher price of imports, leading to lower and/or more variable economic growth than before.

However, even if this impact is not unrealistic in some short-term periods, the long-term effects of FDI on economic growth through the integration into the international economy seem to be positive in many cases (Dritsaki et al. 2004; Makki & Somwaru 2004; Zhang 2001a) although it strengthens the positive effect on economic growth through trade when export-oriented FDI is encouraged and the trade regime liberalised in general and not only in the FDI-receiving industry (Zhang 2001a).

**E. Domestic Policies and Economic Growth**

Finally, there is the possible negative impact FDI can have on the execution of domestic economic policies and so economic growth. OECD (2002, p. 6) writes that “some host country authorities perceive an increasing dependence on internationally operating enterprises as representing a loss of political sovereignty.” The fact of the matter is that foreign firms invest considerable time and effort in influencing regulations and policies in the host economies, often reaping some harvest for their struggles (Desbordes & Vauday 2007; Huang 2005). Foreign firms holding a large stock of FDI in a country can not only gain control over significant share of the local assets but also jobs, thereby gaining political power to influence national policies towards their aims (Zhang 2001b).

An example of this problem has developed in Iceland where heavy-industries, most notably foreign-owned aluminium smelters, consume 80% of all produced electricity in the country. The prominent role of the aluminium companies (Rio Tinto Alcan, Alcoa and Century Aluminum) has put them in a monopsonist position, making it possible for them to influence the price of electricity downwards. This hurts the largest energy company in Iceland, state-owned Landsvirkjun, by lowering its profits. This also puts Landsvirkjun and the Icelandic government – there is a government guarantee on Landsvirkjun – in a tough negotiation position as Landsvirkjun has entered into debts to build up the energy production facilities. The aluminium companies can therefore have serious influence on the national policies of the Icelandic state, possibly running against national interests – such as preserving the environment – and economic growth.

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7 On the per-capita scale, Iceland is the largest electricity manufacturer in the world: 53,000 kWh compared to 26,000kWh in the case of #2, Norway (author’s calculations, based on CIA World Factbook data).
F. Attracting FDI

Despite the perhaps uncertain benefits of attracting FDI, numerous countries have actively done so (Hanson 2001). Tax concessions – similar terms include “tax incentives”, “investment incentives” and “tax holidays” – are one way of doing so. Others are e.g. image building, investor facilitation and servicing, investment generation and policy advocacy (Rajan 2004).

African countries have used tax holidays to attract the FDI while Western European countries have instead allowed faster depreciation of capital or investment allowances (Morisset & Pirnia 2000). The argument is, of course, to attract FDI with offers of a low tax burden, or other attractors, and hope that the positive impact of the FDI will outweigh any potential costs in offering such preferential policies.

Despite its initial attractiveness, this argument seems to have limited support in practice. True, lower taxes seem to attract FDI (de Mooij & Ederveen 2003) although the effects are stronger in the case of developed countries than in developing ones (Goodspeed, Martinez-Vazquez & Zhang 2011). But the costs are high enough to make it questionable whether this strategy should be adopted. Blomström and Kokko (2003) point out, as previously discussed, that since the positive spillovers of FDI do not happen automatically, then it is not an efficient way to improve national welfare to naively divert public policies only towards attracting foreign firms: the host economy must be able to reap the whole benefits, such as by having a high enough level of human capital (“absorptive capacity”). The cost of such attractions can indeed be significant. In the case of Eastern Caribbean Countries, the tax concessions ranged between 9.5% to 16% of GDP during the 1996-2000 period (Chai & Goyal 2008). Chai and Goyal therefore ask if such a high cost of tax concessions is worth it, proposing rather pushing for better infrastructure and labour productivity.

Hanson (2001, p. 14) argues that “the only justification for favouring FDI [with e.g. tax concessions]... is the existence of market failure that is specific to multinational production.” Such market failures could perhaps be the positive spillovers that FDI would bring but Hanson (p. 2) also notes that

> [spillovers associated with FDI are supported by casual evidence from many countries, but their existence and magnitude are... difficult to establish empirically. Indeed, micro evidence from large samples of manufacturing plants in developing countries fails to support the existence of positive productivity spillovers related to FDI.

Therefore, favouring FDI with tax concessions is debatable and it is perhaps more appropriate to emphasise building up fundamentals (education, infrastructure, legal framework, etc.) that will benefit all industries rather than focus solely on a single one or a set of specific investments (Görg & Greenaway 2003).

Overall, based on the review done here, we can cautiously conclude that FDI does seem to have somewhat positive effects on economic growth. However, the positive effects are
more prominent in richer countries where “absorptive” capabilities of the economy are larger (Blomström et al. 1992; Borensztein et al. 1998; Gallagher & Zarsky 2006), where the financial system is more developed (Alfaro et al. 2010; Choong 2012), when the FDI takes place up to a certain degree (Eller et al. 2006) and when it is in the form of Greenfield investments rather than M&A activity (Harms & Méon 2012) although a high level of human capital can improve the positive effects of M&A FDI (Wang & Sunny Wong 2009). Using tax concessions to attract FDI may work (de Mooij & Ederveen 2003) but such policies can be fruitless or suboptimal (Blomström & Kokko 2003; Görg & Greenaway 2003). Furthermore, the possible influence of FDI performing firms on national policies (such as taxation and regulation) must be kept in mind (Desbordes & Vauday 2007).

II. FDI and other Types of Capital Flows

An important issue on foreign direct investment is its connection to portfolio flows and other flows, bank-lending in particular, between economies. One stance of the literature argues that FDI and other flows are substitutes for each other. The other argues differently: FDI and portfolio flows are complementary to each other.

This difference matters for FDI flows are normally considered less volatile than portfolio-type flows. Volatile international capital flows that may leave the country at the first sign of economic problems will only intensify them; capital flows that are procyclical instead of countercyclical can increase economic instability (see e.g. Stiglitz (2000)). So if “cold” FDI flows act as substitutes for “hot” flows, then we can argue that macro-wide financial structures, where FDI stocks are relatively prominent, are more stable than when the balance sheets are ripe with volatile portfolio-flows stock. Indeed, Frankel and Rose (1996) note that currency crashes are less likely when the ratio of FDI to debt is high, underlining the importance of the substitutes/complements issue. Just as importantly, if FDI acts as a stimulus for portfolio flows, then it can possibly have a negative impact on the overall stability of the economy even if the FDI stock itself may be illiquid and FDI flows possibly even countercyclical, thereby smoothing out the performance of the economy.

Claessens, Dooley & Warner (1995) look at the interaction between (net) “long term”, “short term”, portfolio equity and FDI flows in the case of some developed and developing countries. They find that the correlation between the flows is negative and comment (p. 172) that “[different] capital flows are... highly substitutable.”

Ruffin and Rassekh (1986) make an empirical test on the hypothesis that FDI flows and portfolio flows are substitutes. They use US data. Their conclusion is “that every dollar of U.S. FDI results in one less dollar being invested in foreign portfolio investment. Thus, the way [multinational corporations] finance their operations may be irrelevant to the net flow of capital between countries” (Ruffin & Rassekh 1986, 1126). Werner (1994) looks at

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8 Their definitions of “short-term” and “long-term” flows are based on IMF classifications. Short-term flows: change in bank deposit claims, change in bank deposit liabilities, change in other short-term claims, change in other short-term liabilities, change in short-term official claims, change in official liabilities. Long-term flows are everything else, save FDI and portfolio equity. Errors and omissions are ignored.
Japanese data and finds support for the hypothesis of substitution between indirect foreign investment and direct foreign investment as well. Ruffin’s and Rassekh’s methodology can be questioned though as they assume the US economy is a small economy, allowing them to treat foreign (i.e. non-US) interest rates as exogenous in their model and not under any influence of US capital flows. Although they point out (p. 1128) that US net capital outflow is “about 1 or 2 percent of the total world capital market” it is questionable to assume that the world’s largest economy is “small”.

Looking from the institutional point of view, one can argue that portfolio flows and FDI flows should be substitutes, especially in the case of a corrupt receiving country. Papaioannou (2009) points out that corrupt countries have problems attracting FDI which means that they will have to rely on international (bank) lending instead. This observation can be connected to the “Original Sin” problem of developing countries. In this case, one can argue that if the countries were not as corrupt as they are, they would be able to attract FDI instead of portfolio flows which often will be directed through the nation’s banking system – especially if the banks have an explicit government guarantee, making it safer for international investors to lend to the banks. Wei and Wu (2001, p. 20) find that “corruption in a capital-importing country tends to tilt the composition of its capital inflow away from foreign direct investments and towards foreign banks loans.” Therefore, decreasing corruption and consequently, hopefully, improving the inflow of FDI can lessen the need for foreign lending. In that case, FDI flows and portfolio flows could be considered substitutes. One must however contrast Wei and Wu’s result with Albuquerque (2003) but he notes that economies where the government has a low credit rating, which is negatively correlated with corruption (Depken & Lafountain 2006), have a higher share of FDI in their capital inflows than economies with a high credit rating, the reason being that due to intangibility of some FDI assets, such as human capital, they are more alienable than other assets, making them harder to expropriate. This gives FDI assets a lower default premium, making them the preferred type of capital flow when entering a lowly rated country. Albuquerque’s conclusion can be interpreted as the different flows being substitutes, at least for these lowly rated countries, but he comments (p. 380) that FDI is simply “all that they can get.” The implication seems to be that if a country’s credit rating is improved, it will receive more of both flows although FDI’s share of total inflows drops as their credit rating improves.

Finally, there is the “information-based trade off” (Goldstein & Razin 2006) between investing in an enterprise via direct investment or portfolio investment. If an investor decides to invest in a company via a direct investment link (FDI) then (s)he will acquire superior information about the company, information that may not be publicly available or simultaneously available to other investors. But this knowledge comes with a cost according to Goldstein and Razin: an investor that holds an FDI investment in a company risks running into a “lemon” problem: if the investor does not have full information about the company when (s)he decides to acquire an FDI-share in it, (s)he risks that the company is a lemon and if the investor wants then to resell the company after having bought it in the first place, the market realises it is a lemon and demands a large cut in the price. Minimising this

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9 Magee, Yoo, Choi & Lee (2007) would probably disagree as they say that the US economy is not a large country in world trade since its market share is not high enough and it cannot change world prices by applying protection.
information problem is costly. A larger share of the company – an FDI-share rather than a smaller portfolio share (less than 10% of equity) – is also less liquid so the investment cannot be easily disinvested if the investor changes his mind. Therefore, the investor may in the beginning decide not to enter the company as a direct investor but merely via a portfolio investment. In this respect, the FDI and the portfolio investment are substitutes as well.

But the substitution-story may not be so robust in all cases. Dasgupta and Ratha (2000) looked at developing countries and found that private portfolio flows, which they define (p. 12) “as the sum of commercial bank loans, bond financing from private creditors and private equity flows”, increased along with FDI flows into the economies. This can hardly be interpreted in favour of the “substitutes” view.

Dasgupta and Ratha explained why the FDI flows had a positive impact on the portfolio flow by simply pointing out (p. 13) that “FDI adds to the liquidity of the [financial] system in the short-term and improves the medium-term outlook on a particular sector or the economy as a whole.” Other authors have highlighted this conclusion of Dasgupta and Ratha as well (Bird & Rajan 2002). A study conducted by the United Nations found that foreign credit was positively connected to foreign direct investment in the case of Central and Eastern Europe countries (Krkoska 2002). Bosworth and Collins (1999) reach the “complements” conclusion as well, although their conclusions can be scrutinised by the fact that the positive correlation coefficients between FDI flows and portfolio flows are statistically insignificant (Bird & Rajan 2002).

It seems then that international private portfolio flows can gravitate towards the FDI receiving economy, simply because it is doing better: FDI flows stop being, as Albuquerque would perhaps phrase it, “all that they can get.” All this rhymes well with a Keynesian “Beauty Contest” basis of foreign capital flows: international capital flows follow each other, constantly seeking “the prettiest girl in the paper”.

Then there is the final thought that there need not be any certain correlation between the flows, i.e. they need not be either complementary all the time nor substitutes all the time. Reinhart (1999) points out that if it is the case that different types of capital flows respond differently to factors, they need not co-vary at all. This basically means that any possible correlation, negative or not, between different types of capital flow can perhaps be a “spurious regression” and may not necessarily be a stable relationship. A reason for this possible neutrality, according to Reinhart, can be the fact that portfolio flows are influenced by factors such as international interest rates while FDI flows are not so much, the reason being that FDI is more focused on economic fundamentals than portfolio flows. Therefore, portfolio flows can move for different reasons than FDI flows and not be affected by the FDI flows themselves. The argument goes the other way around as well; FDI flows may not be

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10 Comment from Reinhart.
11 Fernández-Arias (1996) estimates, looking at some emerging and developing countries, that 86% of portfolio flows are explained by moves in foreign and not domestic interest rates, a phenomenon he calls “push” influence. Montiel and Reinhart (1999) conclude that interest rates have no statistical significance in determining FDI flows.
influenced by portfolio flows, either positively or negatively. In this regard though, there have been some arguments for the case that interest rates of the home region can affect the FDI flows from it: higher rates of interest in the US and in Europe reduce the outward FDI from these areas (Levy Yeyati, Panizza & Stein 2007). So we cannot argue that FDI flows are not affected at all by international interest rates.

With this in mind, we need to remember the difficulty of correctly identifying capital flows. Bird and Rajan (2002) highlight that the issue whether a capital flow is of FDI nature or not is not clear cut. Furthermore, in the case of Malaysia, they explain how FDI flows can turn into portfolio flows later: “bolted down” equipment, financed with pre-years’ FDI inflow, can be used as collateral in the host-economy financial market and the credit so raised moved out of the country, registering as portfolio flows on the way out. Albuquerque (2003) draws attention to this as well, reminding us that capital flows can change labels. It is interesting to connect this story to that told by Werner (1994), previously mentioned above, where he connects land-collateralised bank loans in Japan and the outflow of capital.

Besides the problem of identifying the label of capital flows, the issue of “complements-or-substitutes” between FDI flows and other capital flows is unresolved. Statistically, the “substitutes” seems to come out on top but the “complements” view is too persuasive to patently reject it. It is perhaps possible to reconcile the two views to some extent by looking at the problem from a dynamic point of view.

It might be possible to reconcile the two views above by arguing that FDI flows and portfolio flows, in their widest sense and including bank loans, are complements in the short run but substitutes in the long. Bandwagon effects and herd behaviour can be influential factors in the short run, explaining why FDI flows and portfolio flows can be complements rather than substitutes while investors are under the spell of the “beauty contest”. However, more sober thinking may compel investors to favour one flow over the other.12 The more favoured flow can then become dominant and the capital needs of the economy will be dominantly serviced by that type of inflow alone. This can apply in the long run. In this context, it is interesting to see that in 1993-1994 portfolio flows were a very prominent share of the private capital flowing into Latin America. But during 1999-2001, the capital inflow was mainly in the form of FDI (Levy Yeyati et al. 2007): FDI flows had substituted portfolio flows as time passed.

It is also possible that FDI flows continue based on long-term possibilities of the economy while portfolio flows are more based on short-term perspectives. Although in some periods the long-term possibilities and the short-term perspectives may go hand in hand, leading to a high correlation between inflows of FDI and other types of capital, giving the impression that the flows are complementary to each other, the situation can change such that short-term perspectives turn sour and portfolio flows turn around. However, long-term possibilities can still be in order, staying attractive for FDI to continue to flow in. Therefore,

12 This potential switching behaviour is not impossible and has been found in other economics related issues: Frankel and Froot (1987) found that the JPY/USD exchange rate was under bandwagon effects in the short run but the contrary in the long run.
the substitutes-complements effects between FDI and other types of flows may turn out to be time-period dependent.

Those propositions – that FDI flows and portfolio flows can either be complements in the short run but substitutes in the long run or complements in one time period but substitutes in the next – need however further research which is outside the scope of this text.

III. FDI and the Balance of Payments

The relationship between FDI, the balance of payments and capital flows is not straightforward.

The reasons for this are mainly two. First of all, although FDI inflow shows up on the financial account of the balance of payments, it is not necessarily true that an actual capital flow takes place. The reason is that the FDI can be financed with domestic funds from within the host economy itself.

Second, FDI is often mentioned as a good way of financing a current account deficit as such financing makes the current account deficit more sustainable (Fischer 1997; Roubini & Wachtel 1999) and less open to a “sudden-stop” crises of inflow of capital (Calvo 1998). But FDI can in fact worsen the current account deficit in the long-run through repatriation of profits. This is so especially if the original FDI was financed with host-economy funds, possibly leading to the situation where there is only outflow of capital (in the form of repatriation of profits) from the host economy.

A. The Origin of Funds for FDI

MNCs have more possibilities in financing their investment than domestic corporations as they can raise funds in both the host and the home economy (Marin & Schnitzer 2011). MNCs may also have better access to international capital markets which can lower their cost of raising capital compared to purely domestic firms. They can furthermore use internal debt between the mother company and its subsidiaries to make use of possible tax incentives and opportunities (Desai, Foley & Hines 2004). The choice of how to finance the FDI project is influenced by those factors.

An early observation that domestic savings seemed to be highly connected to total domestic investment, carried out by domestic and foreign investors alike, was made by Feldstein and Horioka (1980). Their point – there is a high positive correlation between domestic savings and domestic investment – raises the impression that domestic savings are used by investors to invest in that economy rather than transporting the funds between economies. Feldstein (2000) states that FDI is “often” financed from the host economy. Marin and Schnitzer (2011) argue that FDI is “frequently” financed from the host economy. They also point out that if the FDI is financed from within the host economy, it can lead to portfolio inflows from other multinational investors into the economy, the reason being that the
portfolio inflows are used to buy host-economy issued financial instruments used to locally finance the FDI. This can then lead to net capital inflow in the form of more liquid portfolio flows even though those portfolio flows are used to finance an FDI. The actual capital flow is however not in the form of FDI although the investment is.

The effects of foreign firms raising the funds in the host economy can be negative for other firms. Harrison and McMillan (2003), using data from the Ivory Coast, report that if foreign direct investors rest heavily on the domestic banking sector it can have a negative impact on the borrowing constraints of other companies. But that may not always be so. Harrison, Love, and McMillan (2004), looking at 39 countries, estimated that FDI inflows lessen the financing constraint for other firms in the host economy. That paper, however, does not take into the account where the funds are raised.

The topic of why MNCs choose one economy as the source of financing rather than another has been probed into. Desai et al. (2004) find that external financing, rather than internal financing from the mother company, is less used when the affiliate is stationed in an economy with weak creditor rights or underdeveloped capital markets. Hooper (2004), looking at US and UK multinationals, shows that MNCs prefer to use host-economy debt in case of high political risk in the host economy. In the case of high political risk, financing is sought both from host-economy’s banks and governments, practically to get them “on board” the FDI project. The thought behind such financing, one is inclined to guess, is to lessen the risk that the FDI assets will be expropriated (because they are already on board it through their debt financing), which has happened in both democracies and autocracies (Li 2009), in case of political turmoil. Another part of the reason seems to be that in order to lessen exchange rate risk MNCs try to borrow in the weak currency of a high political-risk country, i.e. the host economy.

It is certainly worth mentioning Marin and Schnitzer (2011) in this respect. First, they concluded that high exchange rate risk increases the use of local bank credit. Second, FDI tends to call for an actual capital flow between economies – FDI is not financed from the host economy – whenever managerial problems in the host economy are low. If corruption or political risks are high, (local) bank credit is used to incentivise the manager to show all returns of the investment project rather than funnel some of them for himself. The reason is that in that case, the local bank must be repaid the credit, or it will liquidate the investment – and the manager loses his job. Therefore, the manager has the incentive to show all returns of FDI rather than funnelling them to his own pocket. The lesson is that in order to attract actual FDI-capital flow into the economy corruption of managers and political risk should be low.

An empirical example even exists for the possibility of the financing of an M&A-type FDI not only coming from the host economy but from the operations of the target corporation itself.

In 2009, the Canadian firm Magma Energy Corp. (today: Alterra Power) bought a 32% share in HS Orka in Iceland (through a subsidiary in Sweden, Magma Energy Sweden A/S) off Reykjavik Energy. The total price of this FDI was 12.3 billion ISK (100 million USD) and Magma paid 70% of the investment with a single-payment bond. The bond was issued by
Magma Energy Sweden A/S and transferred into the ownership of Reykjavik Energy, the seller of the share. The collateral of the bond was the stock in HS Orka itself, i.e. the 32% share that was changing hands.

In this case, no funds were raised for this part of the total payment. The ownership of HS Orka was transferred off the books of Reykjavik Energy onto the books of Magma Energy Sweden and instead, Reykjavik Energy got 3.7 billion ISK in cash and held a single-payment bond issued by Magma Energy Sweden.

Of course, Magma Energy Sweden could essentially finance the cost of the bond to a large extent with the profits of HS Orka itself; accumulated profits of HS Orka 2009-2012 amounted to 7.3 billion ISK.\(^{13}\)

Only a small part of these profits were paid out in dividends\(^{14}\) however but this example serves the purpose of showing the possibility of financing the cost of FDI with the operations of the target company itself, especially since most of the contractual cash flows of the bond have not matured and there is still time to extract profits out of the company to be used to service the cost of the original FDI.\(^{15}\)

**B. The Effects on the Balance of Payments**

We have seen that FDI is claimed to be the most advantageous way of financing a current account deficit. There exists the possibility however that the net effects of FDI on net receipts of foreign funds can be negative: although the money can flow into the economy through the capital account in the balance of payments they can later flow out through the current account.

The reason is not only repatriation of profits but the possible impact the FDI can have on the nature of international trade: if the FDI is into an export industry, it is less likely that the net effects on the net receipts of foreign funds will be negative than if the FDI is of the horizontal type, the reason being that profits from horizontal non-export FDI can be made locally but siphoned out of the economy (Brouthers, Werner & Wilkinson 1996). The risk of negative net impacts on the receipts of foreign funds is also prominent if the FDI is financed from the host economy itself, calling for no net capital flows through the capital account in the beginning. Mencinger (2008) asserts that the outflow of capital can be accelerated by the entry of an MNC to an economy but claims at the same time that sudden stops in the inflow of FDI can cause an exchange rate crisis. He therefore calls FDI inflows “addictive”. Levy Yeyati et al. (2007) point out that since the surge in FDI flows has been so “spectacular”, a sudden stop in FDI inflow can have “consequences” for receiving emerging markets and their finances.

\(^{13}\) According to company records.

\(^{14}\) 2013 was the only year HS Orka paid out a dividend since 2009, 150 million ISK in total.

\(^{15}\) Some sources for the FDI of Magma in HS Orka: (Gunnarsson, 2010a, 2010b, 2010c)
The net effects of FDI on the balance of payments are an empirical issue for theoretically, the balance of net receipts of foreign funds can tilt both ways. Studies focusing on the overall net effects of FDI on the net receipts of foreign funds seem to be scant.\textsuperscript{16} Studies focusing on the effect of FDI on the current account are more numerous however and many of them reach either an inconclusive or a negative conclusion.

Hailu (2010) finds that FDI in some African countries\textsuperscript{17} has a negative impact on the balance of trade, which is a “major component” of the current account. Campos and Leal (2013), looking at Brazil, reach inconclusive results regarding the net effects of FDI on the trade balance: FDI inflow boosts both export and imports in the short run – foreign-owned exporters can have the need to import inputs – but only exports in the long run. The net effects on the trade balance are uncertain. In India, inward FDI has a negative impact on the current account (Sarode 2012). And in the case of China, Zhang and Song (2001) find that inward FDI boosted China’s net exports.

The inflow of FDI into the economy can also affect the current account through the exchange rate. FDI inflow, like general inflow of capital, strengthens the exchange rate and can divert domestic spending towards imports rather than domestic production. This would lead to negative impacts on the current account.

**IV. FDI and Financial Stability**

The connection between financial stability and FDI has conventionally been investigated in relation to capital flows and their nature. The reason why is that financial crises have often been connected with capital flows and their reversals (Fernández-Arias & Hausmann 2000). The usual view is that since FDI flows are “cold” the risk of sudden flow reversals leading to balance-of-payments crisis is lower than in the case of “hotter” portfolio flows. Sudden hot money movements are also supposedly due to interest rate differences and expected exchange rate changes while FDI is more based on long-term profit incentives (Sarno & Taylor 1999). Therefore, the conventional view is that if a country wants to reduce the financial instability arising from capital flows reversals, FDI should be increased as a share of total capital inflows (Bird & Rajan 2002). Furthermore, if a country is running current account deficits, they should be financed with FDI inflows rather than portfolio inflows due to the former’s relative irreversibility. We should, however, remember that financing the current account with FDI inflows can be “addictive” (Mencinger 2008).

Empirically, FDI flows have been shown to be more stable than other flows. Lipsay (2001) looked at three famous financial crises (Latin America in 1982, Mexico’s Tequila Crisis in 1994 and East Asia’s problems in 1997) and found that inflows of direct investments had been more stable than portfolio or other types of inflows. Albuquerque (2003) has similar

\textsuperscript{16} One study claimed the overall effects of FDI on balance of payments and the earnings of foreign exchange to be negative (Gallagher & Zarsky 2006).

\textsuperscript{17} Burundi, Cameroon, Ivory Coast, Gabon, Gambia, Ghana, Lesotho, Malawi, Morocco, Nigeria, Sierra Leone, South Africa, Tunisia, Togo, Uganda and Zambia.
results and Wei (2006) finds out that FDI flows (as a ratio of GDP) are less volatile than bank loans (as a ratio of GDP), especially in emerging markets.

The apparent difference in the volatility between FDI flows and portfolio flows can be explained by investment irreversibility. FDI – especially Greenfield investments – is fixed (real capital assets), has sunken costs that call for further inflow of funds to finish the investment (a half-finished manufacturing site is practically useless and worthless except for scrap) and cannot be picked up and taken out of the country. In the meanwhile, portfolio flows can be more easily liquidated, as they are often in the form of marketable financial assets, and the proceeds taken out of the economy. Even a psychological argument can be put forward for why FDI flows are more stable than portfolio flows. It is well known that humans suffer from “sunk cost effects” which can be described as the tendency to continue an investment which money, time and effort has been put into although new information reveal the investment not to be as profitable as previously assumed – and even not profitable. This has also been called “to throw good money after bad” symptom (Arkes & Blumer 1985; Garland 1990; Navarro & Fantino 2005). An FDI performing investor which experiences a financial crisis or a general deterioration in the investment outlook is subject to the sunk cost effects. This is so especially if the FDI is in a Greenfield investment project which is only partially finished when the crisis happens and new information about the profitability of the investment and the macro environment are revealed. Rather than cutting his losses and stopping the investment – rationally thinking on the margin – the FDI investor can decide, perhaps wrongfully and under the spell of sunk cost effects, to continue the investment. The FDI inflow therefore continues despite the weakened outlook. In the meanwhile, the portfolio investor leaves the economy, turning his previous inflow into an outflow. All this can have the effects of FDI flows coming out as a more stable capital flow than other more marketable investments that are not as strongly influenced by the sunk cost effects.  

On the connection between FDI flows and financial stability, we have already mentioned Frankel and Rose (1996) and their finding, looking at emerging markets, that there is a less risk of a capital-flow induced crisis if the FDI is larger as a share of the total inflow of capital. But this result does not seem to be entirely robust and even country specific. Fernández-Arias and Hausmann (2000, pp. 8-9) find that although for developing countries “non-FDI exposure appears to increase the probability of currency crisis while FDI appears to be neutral and, if anything, seems to lower it” this does not apply to industrial countries: “the evidence suggests that FDI is safer than non-FDI only when we restrict the sample to developing countries.” And Babecký et al. (2013, p. 12), in looking at leading indicators for crises in developed countries, find that “[t]he inflow of foreign direct investment turns out to be associated with the severity of crises as well. According to our results, countries which have enjoyed an abundance of FDI inflows tend to suffer more in crises.”

Notice also that Fernández-Arias and Hausmann (2000) and Nitithanprapas and Willett (2000) point out that the high-FDI ratio of total external liability exposures is connected to currency crises. But financial instability can break out in other forms than in a currency crisis.

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18 To the author’s knowledge, this potential link between FDI inflows, their stability and psychological sunk cost effects has not been researched.
Examples are e.g. banking crises and unstable asset prices in the wake of excessive credit expansion.

This leads us to ask an important question: although FDI flows can have a positive effect on the occurrence of a currency crisis, does the same happen to be the case in other types of financial instability? The answer to this question is not straight forward.

First, it should be recognised that although FDI flows are more stable than other types of capital flows, the variability in their levels is considerable. Interestingly, the variability is often higher in the case of developed economies than in developing economies. Figure 1.5 is based on the data from UNCTAD. It shows that the variability of FDI inflows into developed economies has been larger on many occasions than into developing economies. This variability in FDI flows brings in itself instability, just as unstable portfolio flows can have adverse effects on the economy.

**Figure 5: FDI inflows’ variability**

Second, FDI inflows can act as complements to other flows. This has been probed into in earlier sections in this paper. But by attracting other less stable capital flows into the economy, FDI inflows indirectly lead to instability. In other words, if FDI is “smart money” which is channelled to economies only after a careful consideration of the economy’s prospects – rather than “dumb money” which is more subject to ever-changing crowd sentiment – FDI flows can act as a signal to other investors that it is safe to invest in the economy. These signalling effects can not only drag in other FDI flows, as Sarno and Taylor (1999) point out, but other types of capital flows as well, less stable in nature. Therefore, FDI flows can indirectly increase the instability of the economy by complementing other less stable capital flows just as the FDI flows themselves can be destabilizing.

Third, as Bird and Rajan (2002) point out, FDI flows can flow in under the label of FDI but flow out in the form of portfolio flow when the capital assets are used as a collateral to raise funds in the host economy which are then exported through the capital account. The actual
stickiness of FDI inflows can therefore be questioned, perhaps especially so in developed economies with highly developed financial sectors where one can find the experience in and the supply of financial goods and services (such as derivatives, forward contracts, options, etc.) which can be used to more easily collateralise real capital assets which have been built up with FDI inflows in the years before. The stickiness of FDI can therefore, potentially, be dependent on the development level of the banking system, which can have an impact on the real economy, especially after the banking system has reached the stage where its liabilities are considered a final payment in commerce.19

Fourth, FDI has – with some notable limitations as previously discussed – a positive impact on economic growth in the host economy. This should improve the foundations of the economy and make the general populace better off. However, if FDI has a positive impact on growth and that leads to excessive private credit growth in the economy – which can have a negative impact on financial stability (International Monetary Fund 2004; Keen 1997; Minsky 1984, 2008a, 2008b) – the risk is that FDI will have a negative impact on financial stability despite its possible positive impact on economic growth. And FDI can have a boosting impact on the rate of growth of credit in the economy. Bird and Rajan (2002, p. 200) claim that it is a “fact that FDI tends to be accompanied by an increase in bank loans.” Hegerty (2009) found that FDI inflows, as well as non-FDI inflows, encouraged credit growth in Bulgaria over the time period 4Q97-1Q08. FDI can also boost the overall sentiment of economic players in the economy and improved belief in the economy can boost credit growth, both through consumer credit (Lamdin 2008) and investors’ “animal spirits” (Keynes 1936), which can later lead to financial crises (Minsky 1984, 2008a, 2008b). Improved investor sentiment can also lead to stock-market booms and busts, especially in “countries culturally more prone to herd-like behaviour and overreaction and countries with low efficient regulatory institutions” (Zouaoui, Nouyrigat & Beer 2011, 745). Finally, FDI has been found to contribute to aggressive investment growth in the host economy (Henry 2000). Although such investment growth can be considered advantageous the risk is always that it develops into “euphoria” as Minsky highlighted in his Financial Instability Hypothesis (Minsky 1984).

Fifth, especially if the FDI is financed from within the host economy, which is often the case (Feldstein 2000), the risk is that once the profits of an FDI project are repatriated home, the balance of payments of the host economy will suffer in the long run. Related to the effects on the balance of payments is the impact FDI inflow has on the current account. Since the inflow of capital can strengthen the exchange rate it can divert domestic spending towards imports rather than domestic production. This can affect the stability of the economy as such developments would have a negative impact on the current account and the net earnings of foreign exchange (Gallagher & Zarsky 2006; Hailu 2010; Sarode 2012).

Sixth, it is not certain that FDI flows are in fact FDI flows or even if capital flows between countries in the first place. IMF (1998, p. 82) mentions that “questions may be raised about the reliability of data that distinguish [foreign] direct investment from other capital flows”. Furthermore, the FDI can be financed from within the host economy itself (Feldstein 2000;

19 See e.g. Chick (1986) on the evolution of the banking system and its impact on the real economy.
Marin & Schnitzer (2011) so there is potentially no capital or a limited amount of it flowing between economies although FDI activity takes place. This can misinform policy makers into assuming that the underlying external position of the economy is better than it actually is. Market participants can also be misinformed, leading to wrong policy and commercial decisions based on incorrect information. Potentially, this can have unfavourable effects on the financial stability of the economy.

Seventh, Geršl & Hlaváček (2006) make the point that if the FDI is not financed from within the host economy but through the MNC itself, it can lead to less demand by large, international companies in the host economy for bank loans from the domestic bank sector. This, according to Geršl & Hlaváček, can slow down the development of the host economy banking sector and potentially hurts its profits, the reason being that the banks do not find any secure borrowers like the MNCs. The banks can be tempted to respond to this lack of credit-demand from international companies by increasing their extended credit to domestic corporations, which may well be riskier borrowers than the geographically better diversified MNCs. Therefore, credit risk of loans lent out by domestic banks can increase. Geršl & Hlaváček then join this with the point that FDI can, like other investment, go through a life-cycle where the final stage is a relocation decision of the MNC: the FDI is wound down. This relocation, especially if small, domestic firms were servicing the FDI investor, can hurt the host economy and the banking system as well when the domestic firms, previously servicing the FDI investor, lose income. The credit risk subsequently materialises. Therefore, through this channel, FDI can adversely affect financial stability.

Notwithstanding all this, financial stability can also be improved by FDI. First, if FDI flows into an economy during a period of financial stress, the foreign capital so received can be much welcomed. This is particularly so if other foreign capital is flowing out of the economy during an episode of a currency crisis. The FDI inflow can provide much needed foreign exchange into the currency market, dwindling the fall of the local currency. Nevertheless, despite this positive side of FDI, the “fire-sale” aspect of such FDI inflows at times of crisis should be kept in mind. Krugman (2000, p. 44) asks the question: “[A]re foreign corporations taking over control of domestic enterprises because they have special competence, and can therefore run them better, or simply because they have cash and the locals have not?”

The fear of foreign influences can be present as Krugman shows when he quotes (p. 44) the prime minister of Malaysia during the Asian crisis in 1998, Mahathir Mohamad: “We must realize the great danger facing our country. If we are not careful, we will be recolonized.”

The possibility of such, rather extreme, opinions developing into political instability is not nonexistent.

Second, opening up the possibility of FDI can stabilise asset prices as it opens up the possibility of increased liquidity (Krugman 2000). Therefore, liquidity crises can be averted. This would improve financial stability.

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20 Krugman gives two different answers to this question. One is when foreign firms are indeed more efficient than domestic ones and should and do control them through FDI. The other – “the financial panic point of view” (p. 55) – is where the domestic firms are liquidity constrained and the foreign firms only get involved when a crisis hits.

21 The Associated Press (Joshi 1998) quotes him: “We know there are attempts to recolonize us.”
Third, if the FDI helps diversifying the economy towards less economic dependence on one prominent sector, it can help building up resilience against any shocks in that sector; it is wise not to put all one’s eggs in the same basket. FDI has, as an example, been found to support export diversification in developing countries (Iwamoto & Nabeshima 2012). This strengthens the diversification of the relevant economies as they become less dependent on one single type of exports.

Fourth, if FDI activity stimulates gross investment, this can provide wage income for workers, especially in the Greenfield-FDI case (the contrary can in fact be the case in M&A FDI due to temporary layoffs). This can improve household income, making it easier for them to service debt. We can therefore assume that this strengthens financial stability.

Fifth, opening up and welcoming FDI can increase the economy’s access to foreign capital, i.e. it can complement other flows (see II. FDI and other Types of Capital Flows). This is not only important in situations such as those described by the first point here above but in non-crisis environments as well. Increased liquidity and access to capital can lower the rate of interest. Since high rates of interest are an important reason for why financial instability can develop (Keen 1997; Minsky 1984) we can think FDI to have positive impact on financial stability through this channel.

Sixth, as already mentioned, if FDI improves management and productivity of inputs in production processes then this improvement can have a positive impact on financial stability via improved allocation and usage of resources. This effect should be cautiously assumed though as productivity spillovers are not always there (see FDI and Economic Growth).

Finally, are FDI flows procyclical or countercyclical? This would be an important question to answer in regards to whether FDI flows are stabilising or not.

Empirically, both cases exist. Solomos, Papageorgiou and Koumparoulis (2012) find that FDI inflows were procyclical and not countercyclical in the case of the European Monetary Union during 1996-2011. Alas, the possible procyclical nature of FDI inflows can be a source of instability on its own. Ahmed and Martinez-Zarzoso (2013) concluded that FDI inflows into Pakistan were procyclical and destabilizing. But FDI does not need to be procyclical as Contessi, De Pace and Francis (2013) found out. They in fact stated that FDI inflows were the only type of inward capital flows that was not procyclical in emerging economies.22 We can therefore not securely claim that FDI inflows are either pro- or countercyclical.

Overall, as evident from the discussion above, there is a considerable ambiguity whether FDI will lead to improved financial stability or not. Not only is there ambiguity in the net effects in any given time period but we cannot rule out the possibility that the net effects will change between time periods: an FDI project that has a positive/negative impact on the level of financial stability in one time period may not necessarily do so in the next. A

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22 The following emerging economies are in their study: Argentina, Brazil, Indonesia, Mexico, Peru, Philippines, South Korea, Thailand, and Turkey. They use quarterly data, 1992-2005.
potential example is easy to imagine: during the construction of a Greenfield FDI project the
capital inflow provides foreign exchange receipts and the investment itself demands labour
which receives wage income, strengthening the cash flows of the economy. Later, when the
construction is finished and profits are repatriated, the economy experiences both
increased unemployment and lower foreign earnings. Initial positive influences of FDI on
financial stability have turned negative.

**Conclusion**

This literature review has only touched on some of the literature behind FDI and its effects.
We can, cautiously, state that FDI can increase economic growth. Certain conditions, such as
a developed financial system, a high level of human capital and FDI in the form of Greenfield
investments rather than mergers and acquisitions, improve the effects. Furthermore, more
FDI may not always be better: the economy needs time to absorb it. Despite the perhaps
illusory positive effects of FDI, many countries have actively tried to attract it. The costs of
such policies may not always be justified.

FDI’s relationship with other types of capital flows was also probed into. This relationship
can be very dynamically complicated and the issue of whether FDI flows and other types of
capital flows are complements or substitutes is unresolved.

The connection between FDI and the balance of payments was investigated. FDI can
alleviate balance of payments pressures by providing foreign exchange at the time of need.
However, through the leakage of profits back to the home country and potential import-
oriented effects of FDI, the net long-term effects of FDI on the balance of payments can be
negative.

Finally, the complex effects of FDI on financial stability were discussed. FDI can have both
negative and positive effects on financial stability. Negative ones include e.g. the variability
in the FDI inflows themselves, their uncertain stickiness which can give the false feeling of
stability and the possible stimulus FDI flows can have on the development of an investment
boom. Positive impacts include diversification of the economy’s industries, welcome foreign
capital in times of capital flight and stabilisation of asset prices. However, there is ambiguity
in which effects will come out on top and it is furthermore possible that the net effects can
change between periods.

It is worth highlighting the complicated result of this review. FDI should never be judged
either bad or good. Brush strokes can be made on the overall effects of FDI but every single
project is, effectively, special and should always be objectively judged based on its own
merits and vices.
References


http://www.mbl.is/frettir/innlent/2010/05/19/magma_faer_14_7_milljarda/


