

## THE IMPACT OF CORPORATE INCOME TAXATION ON THE LOCATION OF FDI IN THE EUROPEAN UNION

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### 1. Introduction

In the literature of direct foreign investment can be observed numerous studies regarding the role of factors that influence the flow of direct foreign investment. In view of the main motivations of multinational companies in the internationalization of their assets (financial-monetary benefits, comparative advantages and competitive advantages resulting from market imperfections), as a rule, the attention of experts was focused on the following determinants in attracting FDI: domestic market size, exchange rate, labor costs and economic integration. The role of taxation in attracting direct foreign investments in integrated economies has been somewhat neglected in European literature until it was found that the relaxed fiscal policy adopted by the Irish authorities after joining the European Economic Community created in a short time, the attraction of a substantial amount of foreign investment and a significant increase in prosperity compared with other countries (Greece, Portugal and Spain) which, upon accession, recorded a similar level of economic development.

Even if the representatives of the governments that reformed their corporate income tax systems (tax reduction) often assert that the major inflow of FDI in their countries is largely determined by the existence of a relaxed tax environment, there are controversies on the evaluation of the impact of

taxation on FDI location, of scientific. It is clear that the level of taxation incentives the corporations to use different mechanisms (usually financial funds transfer) to move a portion of the tax base from one country to another.

### 2. Situation of FDI in the European Union

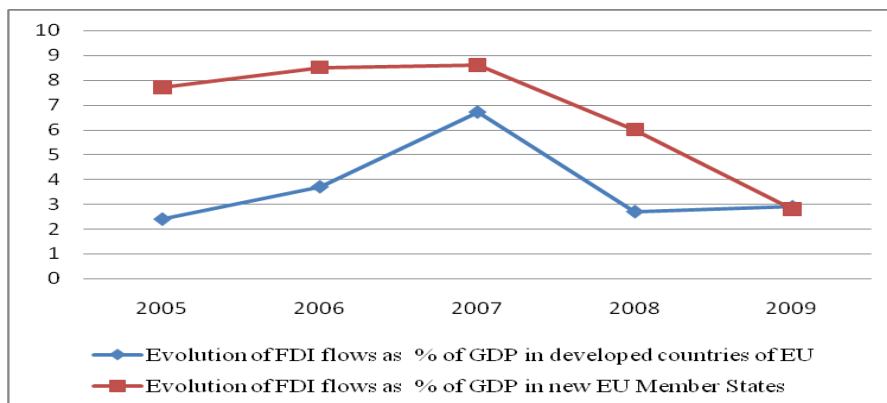
According to information provided by the United Nations Conference on Trade and Development (UNCTAD), the European Union is the largest foreign investor in the world<sup>1</sup>. Despite the growing importance of emerging economies in the world as recipients for companies with foreign capital, the European Union also remains the largest recipient of foreign direct investment. Currently, in the European Union, the foreign direct investment stock is still largely concentrated in the first 15 members because they offer investors access to a developed market, strong industrial base, modern infrastructure and skilled labor. However, the strong growth of FDI flows are observed in the new Member States that have proved particularly attractive to foreign investors due to their geographical location and the relative cost advantages. In figure no. 1 we can observe significant differences between the flows of FDI as a % of GDP in developed countries of the EU and the

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<sup>1</sup> UNCTAD, World Investment Report 2009

flows of FDI as % of GDP in new EU Member States in the period up to the international economic crisis. Since 2007, these differences tend to diminish as a result of significant reduction in

FDI flows in the new Member States, and in 2009 the differences in the flows of FDI as % of GDP almost disappeared.



**Figure no. 1 Evolution of FDI flows as % of GDP in developed countries of EU and new EU Member States during 2005-2009**

FDI flows between Member States have a particular importance for the EU economy. These flows generated the creation of about 15% of existing jobs in the EU, representing a powerful driver of European productivity and economic integration. The situation of FDI flows between European Union countries shows considerable variations of these flows from year to year depending on economic opportunities. During the period 2007-2009, we observe a trend of disinvestment (affecting in particular the new Member States) since the corporations focus more on activities in the markets where they are already operating, in recession.

In the current international economic context (new Member States are no longer able to support the dynamic of the investment activity in the single market), European Union must find ways to attract foreign direct investment from non Member States. Even without the recession, the adoption of some measures to stimulate foreign direct

investments within the European Union became imperative in view of the following aspects:

- new EU Member States, which succeed to attract a significant volume of foreign direct investment because of its benefits (the low cost of production factors, facilities in connection with the access to capital, tax incentives, etc.), would gradually lose its attractiveness, with economic and social development;
- many countries situated near European Union (Russia, Ukraine, etc.) promote an active policy of attracting FDI, constituting an attractive location for investments in search of resources or markets.

The evolution of percentage changes in FDI inflows in one year to another (see table no. 1) in worldwide, in the European Union and in transition countries demonstrates the increased potential to attract foreign direct investments of EU neighboring countries.

**Table no. 1 Percentage change in FDI inflows over the previous year**

	2006	2007	2008
-in worldwide	50.1%	35.4%	14.%
-in the European Union	24.8%	42.4%	-42.4%
-in transition countries	76.3%	66.6%	25.9%

Source: UNCTAD handbook of statistics calculated, 2009, p. 340-34

In the years 2006-2008, we observe a growth rate of FDI inflows in the European Union much lower than in the transition countries and sometimes even lower than in worldwide.

Therefore, the improvement of fiscal conditions for multinational companies operating in the EU is necessary if we consider the European Commission's objective to improve the internal market efficiency, so as this market to become more competitive in the future.

### **3. The corporate income tax situation in the European Union**

The removal of barriers to free movement of capital and labor encourages governments to reduce tax burdens to attract foreign direct investments, financial investments or for other objectives of their economic policy. The reduction of corporate income tax rates is a frequently practice in the new Member States that have been forced to adopt this measure to keep their economies attractive, in the context of the abolition<sup>1</sup> tax benefits for foreign investors<sup>2</sup>. Thus, in Poland the corporate income tax statutory level fell from 27% in 2003 to 19% in 2010, in Romania from 25% in 2003 to 16% in 2010, in Bulgaria from 23 5% in 2003 to 10% in 2010.

These fiscal policy have received a similar response from the old Member States. The study "Taxation Trends in the European Union" in 2010 shows the average corporate income tax fell from

35.3% in 1995 to 23.2% in 2010 in European Union member states and from 37.5% in 1995 to 25.7% in 2010 in the Eurozone Member States. In recent years, the most significant reductions were achieved by Germany (8.9 percentage points in 2008 compared to 2007), Italy (5.9 percentage points in 2008 compared to 2007) and Netherlands (4.1 percentage points 2007 compared to 2006).

In the 27 European Union countries, the reduction of statutory corporate income tax rates of was accompanied by a reduction in revenue from those taxes expressed as a percentage of GDP in 2001-2004, followed by a revival of their in the context of some high growth rates recorded in 2005-2007 and a new decline in the context of international economic crisis (figure no. 2).

In connection with the corporate income taxes as % of total taxes, we observe the same trend of dynamics and a greater difference between the corporate income taxes as % of total taxes in Eurozone Member States and the corporate income taxes as % of total taxes in the 27 Member States (fig.no. 3).

As a general trend in 1999-2008, we noted an increase in corporate income tax receipts. This has been determined, according to J. Becker, C. Fuest and T. Hemmelgarn<sup>3</sup>, by the expansion of the business tax base by eliminating tax deductions and provisions, on the one hand, and rising corporate profitability, on the other part.

<sup>2</sup> Matei, G. Pîrvu, D., *Prospects harmonization of corporate taxation in the European Union*, Theoretical and Applied Economics, no. 1, 2009, p. 82

<sup>3</sup> Becker, J., Fuest, C., Hemmelgarn, T., *Corporate tax reform and foreign direct investment in Germany – Evidence from firm-level data*, CESifo Working Paper, No. 1722, 2006, p. 9-32

Diminishing of tax burden generated of economic activity by broadening the tax base (according to Laffer curve). Sorenson P.B. even introduces a new idea in explaining the phenomenon of increasing revenues by taxing businesses: the decline of certain sectors such as agriculture, was compensated by

developing other sectors (industry and financial intermediaries) which enhanced the corporatisation of the economies of Member States. In our opinion, the globalization also generated an increase in gross profit rate through intensification of the investment speed.

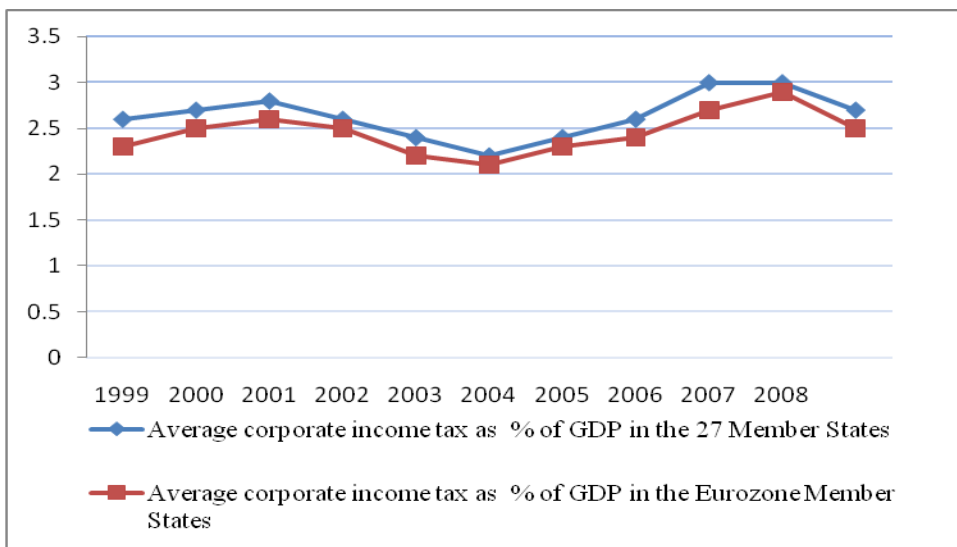


Figure no. 2 Evolution of the average corporate income tax as % of GDP

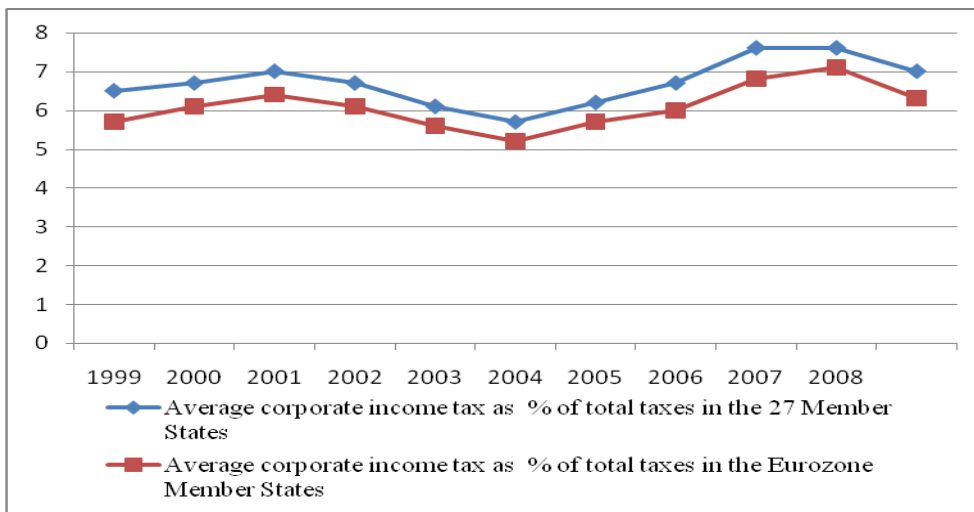


Figure no. 3 Evolution of the average corporate income tax as % of total taxes

#### 4. The main theoretical approaches regarding the role of corporate income taxation in FDI location

Currently, all authors of empirical studies regarding the impact of taxation on capital movements recognize that the level of taxation affects investment location decisions of multinational companies and capital flows and influences profit transfers between subsidiaries. However, views regarding the foreign direct investments sensitivity from levels of taxation are different. A series of studies in European countries suggests that taxation has a relatively low impact on FDI as a result of reduced influence of taxes on relocation costs<sup>4</sup>. Other authors show that a high level of corporate income tax discourages FDI inflows even though other factors, including volume and quality of goods and services, would be favorable to attracting foreign direct investments. Thus, further analysis of FDI flows between 7 origin countries of multinational companies (Austria, Germany, France, Italy, Netherlands, UK and USA) and 8 host countries (Bulgaria, Croatia, Czech Republic, Hungary, Poland, Slovakia, Slovenia and Romania) during 1995-2003, Christian Bellak and Markus Leibrecht concluded that the corporate income tax is a key factor in location decision of foreign companies, having almost equal importance to the labor cost factor. A one percentage point reduction in the effective rate of corporate income tax may lead to a maximum increase FDI inflows by 4.5%<sup>5</sup>.

Analysis of R. A. DeMooij and S. Ederveen regarding the impact of taxation on capital flows showed an elasticity of -2.4%. Consequently, 1

percentage point reduction in tax rate will increase capital flows by 2.4%<sup>6</sup>. Agnès Bénassy-Quéré, Lionel Fontagné and Amina Lahrèche-Révil studied the sensitivity of FDI from the tax rates for 11 OECD countries over the period 1984-2000 and they concluded that tax rates play a significant role in investment location FDI. Thus, while the reduced tax rate contributes significantly to attracting foreign direct investment, high taxes discourage FDI inflows. On the other hand, the positive impact of differences between the level of taxation is not the same in all countries that choose to reduce the tax rate to attract foreign capital. FDI flows are directly proportional to the differences existing between the level of taxation in different countries<sup>7</sup>.

Disputes about the importance of corporate taxation on FDI location are lit, especially because many empirical studies regarding the elasticity of FDI to corporate taxation have focused most often on the issue of taxation. These studies ignored the possibility that FDI flows to answer not only at fiscal policies and bilateral agreements between countries origin and host countries but also at tax policies from countries that can provide alternatives for the location of foreign direct investments<sup>8</sup>.

A step forward in researching the effects of taxation on decisions of foreign direct investments location was made by Salvador Barrios, Harry Huizinga, Luc Laeven and Gaëtan Nicodème, that making comments on a sample of companies from 33 European countries attained at more detailed results. Thus, the four authors proved that the

<sup>4</sup> Edmiston, K., Mudd, S., Valev, N., *Tax Structure and FDI: The deterrent effects of Complexity and Uncertainty*, Fiscal Studies, no. 24, 2003, p. 27-41

<sup>5</sup> Leibrecht, M., Bellak, C., *Foreign Direct Investment in Central - and East European Countries: A Panel Study*, Department of Economics, Vienna University of Economics, Vienna, 2005, p. 16-25

<sup>6</sup> DeMooij, R. A. and Ederveen, S., *Taxation and foreign direct investment: a synthesis of empirical research*, International Tax and Public Finance, no. 10, 2003, p. 13

<sup>7</sup> Bénassy-Quéré, A., Fontagné L., și Lahrèche-Révil, A., *Tax Competition and Foreign Direct Investment*, CEEPII, no. 17, 2003, p. 15

<sup>8</sup> Hajkova, D., Nicoletti, G., Vartia L., Kwang-Yeol Yoo, *Taxation, business environment and FDI location in OECD countries*, Economics department working papers, no. 502, OECD, 2006, p. 22

sensitivity of FDI to the corporate income tax level varies greatly depending on the magnitude of the observations made<sup>9</sup> (for a small number of observations it is very high sensitivity)<sup>10</sup>. These results suggest that estimates regarding the impact of taxation on the decisions of foreign direct investments location will be relevant only if the database will include more countries and companies in the sample will be heterogeneous in terms of investments. Currently, the aggregation of the two conditions is difficult in the absence of a very comprehensive international databases.

If studies which attempted to measure the intensity of the relationship between taxation and the decisions location of foreign direct investments does not give relevant results, it is agreed that the corporate income taxation is a strong determinant of the foreign direct investment financial structure. Thus, the econometric modeling performed by P. Moore and F. Ruane on the basis of observations of over 300,000 companies in the AMADEUS database, in 1994-2002, showed that an increase of the taxation level of a country with 10 percentage points will generate the increase with 3.4 percentage point in the share of debt in the financial structure of subsidiary corporations in the country<sup>11</sup>. Similar results have arrived and H. Also, H. Huizinga, Laeven L. and G. Nicodème obtained similar results in 2007, showing that through intra-group loans, an increase with 10 percentage points in the level of taxation in one country will lead to an increase with 2.44 points percentage in the share of debt in the

financial structure of subsidiary corporations in the country<sup>12</sup>.

### **5. Comparative analysis of FDI inflows at % in GDP and the level of effective tax rate of investment in European Union countries**

Realized studies until now provided mixed results about the effects of taxation on the location of corporate subsidiaries, so the concern expressed by some representatives of the European countries regarding the issue of tax competition within the single market does not seem fully justified. However, statistical evidence on the FDI inflows as % of GDP and the level of taxation on investment, given in figure no. 4, 5 and 6<sup>13</sup>, show a correlation between two factors: in most European Union member countries a high level of the effective investment tax rate<sup>14</sup> is accompanied by a low level of FDI inflows as % of GDP and vice versa.

In 2005, Estonia succeed to attract the largest stream of FDI inflows as % of GDP, practicing an effective tax rate on investment of 21.1% (higher than those in Romania, Bulgaria, Cyprus and Poland in the same period). The highest effective tax rate of investment observed in Spain (36.5%) was correlated with low levels of FDI inflows as % of GDP (2.21%).

In 2006, the countries with effective tax rate of investments was reduced (Bulgaria, Romania, Slovenia, Estonia) have achieved a level of FDI inflows to GDP also raised. This correlation is however not valid in all

<sup>9</sup> numărul de țări și numărul de filiale ale corporațiilor incluse în eșantion

<sup>10</sup> Barrios, S., Huizinga, H., Laeven, L., Nicodème, G., *International Taxation and Multinational Firm Location Decisions*, CEB Working Paper No 37, 2008, p. 26

<sup>11</sup> Moore, P., Ruane, F., *Taxation and the Financial Structure of Foreign Direct Investment*, Institute for International Integration Studies, Trinity College Dublin, Discussion Paper No. 88, 2005, p. 2

<sup>12</sup> Huizinga, H., Laeven, L., și Nicodème, G., *Capital Structure and International Debt-Shifting*, IMF Working Paper No. 39, 2007, p. 4

<sup>13</sup> was not taken into account the specific case of Luxembourg.

<sup>14</sup> data were taken from: Devereux, M., Elschner, C., Endres, D., Overesch, M., Schreiber, U., Heckemeyer, J., Spengel, C., *Estimates of the effective tax rates on investment in the EU member states*, Centre for European Economic Research, 2008, p. 25

situations. For example, in Poland and Ireland, the low level of taxation on investment was not accompanied by a significant inflow of foreign direct investments.

In 2007, Bulgaria was in the top of countries that attracted the most foreign direct investments (29.6%), practicing the lowest effective tax rate on investment (8.8%). States where the tax rate on investment was high (Italy, Germany, France) attracted a small volume of direct foreign investments (to GDP). However, in Belgium and the Netherlands have recorded inflows of foreign direct investments more than the EU average, even where there is a high rate of taxation on investment. In these

countries there is, however, a special tax regime for holding companies.

Therefore, the statistical evidence on foreign direct investment inflows and the taxation of investments in European Union countries can not provide us clear results regarding the effects of taxation on FDI location, because there is exceptions to the rule of inverse correlation between the two factors. It is clear that during the period studied, the tax rate level diagram deforms more and more for the effective investment tax rate series, providing evidence of the existence of an EU tax competition. In most cases there is a positive correlation between tax rates and location of FDI in the European Union.

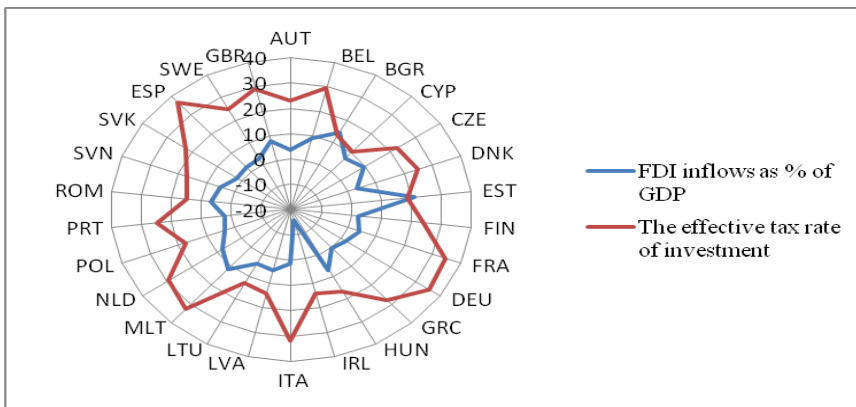


Figure no. 4. FDI inflows as % of GDP and the effective tax rate of investments in 2005

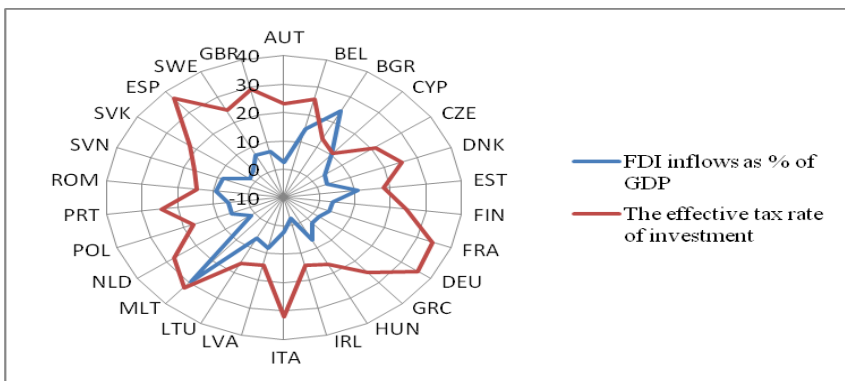
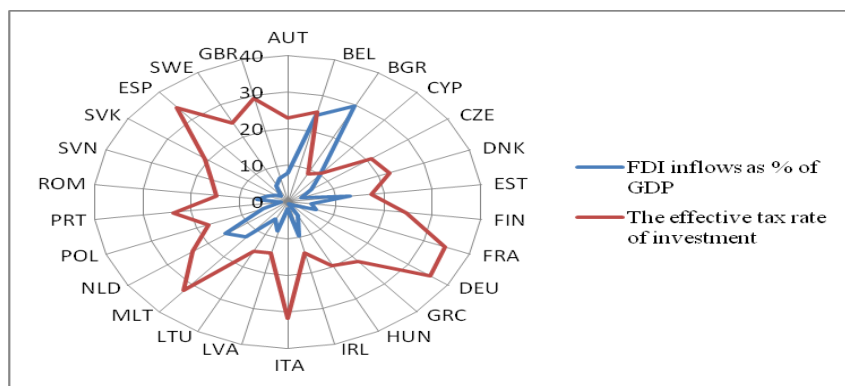


Figure no. 5. FDI inflows as % of GDP and the effective tax rate of investments in 2006



**Figure no. 6. FDI inflows as % of GDP and the effective tax rate of investments in 2007**

## 6. Conclusion

In the European Union, the tax competition could come in the next period, a phenomenon with implications more important because the movement of production factors, especially capital, will become much easier on the global market. The most competitive countries will have an advantage expressed in total revenues in the short term and a higher growth rate in the medium and long term. Under these conditions, dissensions between European countries will increase, increasing controversies about the limits of national sovereignty in the field of direct taxation and especially corporate income taxes.

Even if the tax regime is not the only factor that determines decisions for the relocation of foreign capital, reducing corporate tax rates in some new Member States has increased the attractiveness of these countries for foreign investors. In these circumstances, the countries of western Europe announced (and implemented) significant reductions in their rates, accusing the new states have initiated a fiscal competition with adverse consequences in long-term.

But tax rates are not an relevant indicator of the taxation level for companies if all aspects of the method of determining taxable income (deductions, rebates, tax credits and exemptions) are not taken into account. The analysis of a wide range of specific elements of corporate income taxes in the European Union showed us that different tax regimes operate from one country to another, which leads to distortions in the location of foreign investment and the optimal allocation of resources. In 2001, the European Commission stated that these problems could hinder the achievement of Lisbon that the EU should become the most competitive and dynamic knowledge-based economy in the world. In the field of direct taxation a certain degree of tax competition is not only inevitable but also desirable, if it take the form of a fair tax competition. This stimulates the Governments to provide the best possible conditions for business at a certain level of taxation<sup>19</sup>. Member States' efforts should focus on combating harmful tax competition that generates attracting corporate tax bases and hijacking capital flows.



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