

AN EMPIRICAL STUDY OF THE RELATIONSHIPS BETWEEN CORRUPTION, CAPITAL LEAKAGES AND COUNTRY RISK PART I*

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Resumen

Este trabajo investiga la relación entre corrupción y fuga de capitales en países en desarrollo. La parte I trata de definir y medir la fuga de capitales, así como las diversas causas de ahorros en el exterior. Nuestra investigación contribuye de varias formas a la literatura sobre el tema. En primer lugar, en países emergentes la fuga de capitales ha atraído menos atención que la afluencia de capitales desde el exterior. En particular, la fuga de capitales mantuvo un perfil bajo en los círculos académicos hasta finales de los años noventa. Además, los estudios con frecuencia toman la fuga de capitales como un problema de cartera y muy pocos consideran la corrupción como un «factor de empuje». En segundo lugar, nuestra investigación se centra en las razones por las cuales la fuga de capitales merece un interés renovado, considerando que la globalización de los mercados financieros ha ampliado la diversificación de oportunidades para los residentes nacionales. Más aun, las agencias oficiales han expresado su preocupación por la reutilización de generosos flujos de ayuda para países en desarrollo y los grandes préstamos en los mercados internacionales de capital fuera de las economías de los países en desarrollo. Después de la reunión del G-7 en Colonia en 1996, las rebajas de deuda mayores y más amplias, junto con el fuerte énfasis en políticas sustentables de desarrollo, se enfocaron en la urgencia de la repatriación de los capitales fugados. En tercer lugar, asumimos que la corrupción combina dos tipos de fuerzas centrífugas de la huida de capitales: el dinero generado por la corrupción sale del país por temor a ser descubierto por las autoridades tributarias y judiciales y, adicionalmente, por temor a que un gobierno corrupto no proveerá un ambiente estable y favorable para el ahorro y las inversiones rentables. En la parte II del estudio, ponemos a prueba la suposición de que a mayor nivel de corrupción, menor es la inversión privada en el entorno nacional y mayor es la fuga de capitales.

Palabras clave: corrupción, gobierno, fuga de capitales, instituciones financieras internacionales (IFI), crisis financiera, lavado de dinero.

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Abstract

This paper investigates the relationship between corruption and capital flight in developing countries. Part I tackles the challenge of defining and measuring capital flight, as well as the various root causes of expatriated savings. Our research contributes to the corruption and capital market literature in several ways. First, the issue of capital flight has attracted less attention than that of external capital inflows in emerging market countries. In particular, capital flight has kept a low profile in academic circles until the late 1990s. In addition, research often looks at capital flight as a portfolio issue, and very few studies consider corruption as a «push factor». Second, our paper looks at why capital flight deserves renewed interest, as the globalization of financial markets broadens investment diversification opportunities for domestic residents. Increasingly, official agencies express concern regarding the recycling of generous development aid flows and heavy borrowing in the international capital markets outside the developing countries' economies. In the aftermath of the G-7 1996 Cologne meeting, larger and broader debt relief, coupled with a strong emphasis on sustainable development policies, focuses on the urgency of capital flight repatriation. Third, we assume that corruption combines two kinds of centrifugal forces for capital leakages: corruption-driven money leaves a country because of fear of being caught by the tax and judiciary authorities; in addition, money leaves a country because of fear that a corrupt government will not provide a stable and conducive environment for safe savings and profitable investment. In Part II of our research, we test the assumption that the higher the level of corruption, the less conducive the national environment for private investment, and the greater the capital leakages.

Key words: corruption, governance, capital flight, IFIs, financial crisis, money laundering.

1. Introduction

Until the late 1990s, the issue of capital flight attracted less attention than that of external capital inflows in emerging market countries. In particular, capital flight has kept a low profile in academic circles. A stronger focus emerged when it became clear that capital outflows played a catalytic role in financial crises, such as the Mexican crisis of 1994, the Asian crisis of 1997-98, and the Argentinean crisis of 2001. The reason for this limited attention seems evident: data, by definition, are scarce and of limited quality. There is, however, another deeper reason: no theoretical consensus exists regarding the underlying roots of capital flight. Scholars, indeed, consider it from three angles of analysis:

1. Capital flight does not require any normative theoretical posture as it is

related to portfolio choice; economic agents manage a portfolio of assets and consider alternative investment decisions based on risk/return relations. Hence, they rely on political expectations, real exchange rate evolution, real interest rates differentials and the like. Capital flight is considered as foreign direct investment.

2. Capital flight widens the gap between domestic savings and investment. It is a symptom of distrust in the country's macroeconomic and socio-political stability. Consequently, the larger the amount of capital flight, the greater the need to rely on external indebtedness to finance national development objectives. One of the policy aims of a government should be to help minimize capital flight and to maximise the repatriation of expatriated savings.

3. Capital flight is one of the triggers of financial crisis in emerging market countries. As such, capital flight is a symptom of bad economic policies, including mismanagement of interest and exchange rates, excessive tax burden, inflation, budget deficit, and an excessive public sector borrowing requirement resulting in crowding out of the private sector.

In the course of this working paper, we aim to test the relationship between corruption and capital leakages. In Part I, we first tackle the measurement issue by comparing several ways of looking at capital flight, namely, the errors and omissions in the capital account of the balance of payments, the private non-bank deposits in international banks overseas, and the exchange rate adjusted changes in these external deposits. The source for the first set of data is the IMF's International Financial Statistics, while the source for the two latter sets is the quarterly review of the BIS. In Part II, we shall look at the relationship between capital flight and bad governance, as measured by corruption in the country facing capital leakages. The sources for this second set of data are the ICRG and Transparency International's CPI indices. Our hypothesis is that the greater the corruption and the lesser the credibility in the government's policy, the larger the capital leakages. We assume that domestic residents, both private companies and households, rely on rational expectations to manage their portfolio and use all possible available information. They make portfolio management decisions from their observations of the governments' economic policy and on the socio-political environment. Corruption is likely to play a central role in these choices and it will feed capital leakages toward safer

and more stable destinations. Finally, we conclude by considering whether capital flight can be used as a reliable early warning signal of rising country risk.

2. The rising issue of capital flight

Capital flight is probably as old as the combination of capital mobility with political and economic uncertainty, if we take capital to include cattle, gold, jewels, or financial assets. Kindleberger observes that financial capital flight can be traced back as early as the XVII century, with the Huguenots following the Revocation of the Edict of Nantes in 1685 (Kindleberger, 1986: 1-9). The French Revolution also led to massive capital flight. In his 1934 article, Arthur Feiler (1934: 63-80) raises concerns that capital outflows from debtors to creditors deepened the Great Depression, causing an abrupt halt to international lending and weakening a key link in world economy. Gottfried Haberler (1976: 11) also concludes that the German depression was dominated by international developments, especially by capital flight. The latter was unquestionably a very powerful factor in the international transmission of economic imbalances, known as the Great Depression. More recently, the election of a Socialist President in 1981 in France triggered substantial capital expatriation. And in the emerging markets, Argentina, Brazil and Russia are notorious examples of private capital outflows resulting from overvalued exchange rates and socio-political tensions. Capital flight from developing countries has been estimated by the Brookings Institute to be as high as \$800 billion annually. Therefore, for every dollar that flows into the developing world as aid, at least ten dollars flow out in the

form of capital flight (World Bank/IMF Annual Meeting, 2005). For Africa alone, corrupt practices and the transfer of illicit funds have contributed considerably to capital flight, with an estimated \$400 billion being looted and stashed in foreign banks (United Nations, 2002). The magnitude of the problem is so large that it has led to a special UN Convention against corruption and capital flight, signed by 43 countries in Mexico in December 2003¹.

Despite the evidence of a long history of «centrifugal forces» of capital pushed out national boundaries, capital flight has not attracted much academic or professional attention before the mid-1980s. The two starting points were a seminal article in Morgan Guaranty Trust's World Financial Markets review (March 1986) and a conference organized under the auspices of the Institute for International Economics, gathering academics and policymakers². These two initiatives echoed the warning of US Treasury Secretary Baker in 1985: dealing with capital flight is a prerequisite for mobilizing additional foreign credit for troubled LDCs. Clearly, at a time of strong official pressure to induce international banks' credit refinancing, the magnitude of capital flight discouraged

private creditors from further contributing to foreign debt accumulation. As Cuddington (1987) summarizes: «There is growing concern that it is futile to pour more funds into liquidity-constrained developing countries if a large portion of the increased lending merely flows right back out in the form of capital flight».

More recently, capital flight has attracted renewed interest, for several reasons. Firstly, the combination of financial liberalization in developing countries (with reduced transactions costs thanks to the so-called NTIC revolution), considerably increases the scope for capital flight in response to global risk signals. Economic agents, from both industrialized and emerging market countries get access to instantaneous and inexpensive information while their range of choices widens. This is echoed by a World Bank study of Russia's financial volatility where fast liberalization of capital markets was carried out in the midst of the transition crisis with high inflation, uncertainties about property rights and government regulations, and a generally negative investment climate, resulting in large capital outflows. According to some estimates, about \$ 20 billion in capital flowed out of Russia annually throughout most of the 1990s, making «capital flight» the biggest obstacle to Russia's economic development (The World Bank Institute, 2004). This situation underscores the importance of creating a flexible investment regulatory framework, which is critical not only for attracting foreign investors but, even more importantly, for preventing and reversing domestic capital flight (The World Bank Institute, 2004). The example of Russia sheds light on the prudence of the Chinese monetary authorities with regard to financial liberalization. Indeed, despite

1. Other official initiatives to fight corruption include the UN Global Compact in 1999, the Extractive Industries Transparency Initiative that constitutes a voluntary cooperation framework between governments and companies, the World Bank/OECD Global Corporate Governance Forum, and the OECD Principles of Corporate Governance.
2. World Financial Markets, March 1986, Morgan Guaranty Trust Company of New York, and Conference on Capital Flight and Third World Debt, IIE, Carnegie Conference Center, Washington, D.C. October 2-3, 1986.

limited capital account liberalization, China's cumulative capital flight has nevertheless been estimated at US\$ 920 billion between 1998 and 2001 (Gunter, 2004)³.

Secondly, IFIs and government agencies raise eyebrows when capital flight happens in a context of generous development aid flows and heavy borrowing in the international capital markets. Debt and capital flight have been correlated in many Latin American countries. Pioneering statistical analyses of capital flight in the mid-1980s illustrated the size of the phenomenon in relation to capital inflows (Bouchet, 1986). It has been estimated that «more than half of the money borrowed by Mexico, Venezuela, and Argentina during the last decade (the 1970s) has effectively flowed right back out the door, often the same year or even month it flowed in (Henry, 1986).» The focus on the «*sacadolares*» sheds light on the accumulation of external liabilities while the private sector keeps accumulating private claims against international institutions. This is why several observers pointed out that banks were paid twice, first for arranging fee-based syndicated eurocredits, and then for courting deposits from wealthy third world individuals, corporations and government agencies (Glynn and Koenig, 1986).

Thirdly, corruption has become an embarrassing issue for IFIs who face growing pressure to give top priority to

productive investment and social projects. At the 1996 Annual Meeting, World Bank President Jim Wolfensohn spoke about «the cancer of corruption» and its devastating effect on development⁴. On the debt reduction front, corruption is also a hot topic. The HIPC Initiative, in the aftermath of the G7 1996 Cologne meeting, aimed to broaden debt relief to pave the way for long-term sustainable development, including market access, capital flight repatriation, and better governance. Since then, eligibility for the HIPC treatment includes robust policy measures to boost domestic investment and savings. Large-scale debt reduction is thus accompanied by close scrutiny of the domestic use of the debt servicing relief proceeds, so that the alleviation of liquidity constraints benefits high priority social projects, and not international bank accounts. Ten years after the IFIs's new focus on fighting corruption, President Wolfowitz's corruption agenda moved into higher gear in February 2006 when the Bank decided to freeze project lending or debt reduction support to several countries including India, Chad, Kenya, Argentina, and Congo, because of corruption (World Bank Press Review, 2006: 1-2).

In addition, the relation between corruption, money laundering and terrorist financing got a new emphasis with the Financial Action Task Force, the OECD-based global watchdog on money laundering, whose aim it to beef up anti-money laundering laws throughout the world, with both rewards and penalties. In the United States, the USA Patriot Act of 2001

3. A comprehensive poll organized in 16 large Chinese cities in 2005 indicated that corruption was on top of Chinese people's concerns. *Les Echos*, March 4-3, 2006, page 8. Large scale corruption scandals are a common feature in the banking system, as witnessed in Bank of China where hundreds of millions of dollars were stolen and shifted overseas in 2005. *Les Echos*, March 8, 2006, page 36.

4. See: «Preventing Corruption in Bank projects», World Bank's Anti-corruption Knowledge Center, home page in [www1.worldbank.org/publicsector/anticorrupt/prevent.htm].

gives the US Treasury wide authority to deny money launderers use of their financial systems to conduct criminal activities and to enhance international regulation and cooperation. Corruption is considered as a major source of money laundering and capital leakages.

3. The challenge of defining capital flight

There is no consensus on an all-encompassing definition of capital flight. The lack of a generally accepted definition increases the difficulty for measuring it and for devising policies to reduce it or reverse it. In his early seminal paper on capital flight, Kindleberger (1986) observes: «It is difficult- perhaps impossible- to make a rigorous definition of capital flight for the purpose of devising policies to cope with it.» Most of the distinctions are elusive, whether domestic capital is sent abroad on a long-term basis for fear of confiscatory taxation or political instability, or resulting from short-term speculation with regard to misalignment of interest and exchange rates. Cuddington (1986) even considers that human capital and the related «brain drain» should also be included in capital outflows.

Classifying capital flows might adopt either an accounting distinction such as flow versus stock or a normative one, with a negative connotation for capital that flees the country. Regarding an accounting taxonomy, capital flight might include three different flows: (1) all capital outflows, both private and public, (2) only private nonbank capital outflows, or (3), adopting a maturity distinction, the definition would focus only on short-term private nonbank outflows. Alternatively, the

definition could adopt a stock focus, with various degrees of comprehensiveness. Capital flight might include all foreign assets (both reported and unreported, including financial assets, FDI and portfolio investment, and real estate) acquired by domestic residents, including both the public sector and the private banking and nonbanking sectors. Morgan Guaranty (1986) uses a similarly extensive definition, namely, the reported and unreported acquisition of foreign assets by the nonbank private sector and by some elements of the public sector (Morgan Guaranty Trust Company, 1986: 13). A narrower definition would focus on nonbank private financial claims against non-residents. This approach considers capital flight as foreign direct investment. It does not warrant any normative theoretical posture as it is related to portfolio choice: economic agents, indeed, manage diversified portfolios of assets and consider alternative investment decisions based on risk/return relations (Lamdany, 1987).

Regarding a normative approach to capital flight, the definition will depend on the motives behind capital outflows, i.e., private investors will shift their assets abroad through illegal channels in order to escape from domestic tax and legal authorities. This approach will focus on the «errors and omission» items in the capital account, interpreting them as proxy for illegal transactions. This normative stance considers that capital flight stems from greed. Baker and Nordin (2004) define capital flight as cross-border dirty money that is illegally earned, illegally used or illegally transferred. It has three main facets: criminal proceeds from drug trafficking and racketeering; commercial proceeds from transfer pricing and shady business transactions, often hidden in tax

havens; and corrupt proceeds from greedy government officials.

In the course of our paper, we shall use «capital leakages» rather than capital flight to emphasize those expatriated savings that escape beyond the reach of domestic investors and national governments, seeking external protection against socio-political instability and bad governance, or against economic disincentives such as overvalued exchange rates, high taxes and low real interest rates.

4. Capital flight and economic literature

A few scholars argue that long-term capital flight is impossible and short-term capital flight is not important. The latter results from bad monetary policies and the adjustment process should be spontaneous provided that the monetary authorities pursue proper policies. This is the case of Machlup (1942: 512-520) who considers that capital flight will result in higher interest rates and lower prices, and possibly deflation in the capital exporting country, leading to an automatic transfer repatriation process. This moderate interest is at odds with the larger and increasing amount of academic work regarding the relations between capital flows and corruption. Capital flight, however, can be considered as foreign investment. As such, its determinants are the expected (after tax) rate of return in relation with portfolio diversification objectives. One can assume that the regulatory framework, the socio-political environment, and corruption should be the key variables of influence of capital leakages. Likewise, Walter (1986) considers that asset-holders engage in constant redeployment in their search

for an efficient portfolio that maximizes total returns under a given risk constraint. There is no reason why residents of emerging market countries should not behave similarly to non residents, i.e., residents of OECD countries. Capital flight thus stems from international asset redeployment and portfolio adjustment undertaken in response to perceived deterioration in risk/return profiles. This deterioration occurs in the presence of conflict between the objectives of private asset-holders and governments. Pattillo et al. (1999) examine capital flight in the context of portfolio choice, focusing on capital to labour ratio, indebtedness, exchange rate distortions, and risk ratings; all proxies for differences in the risk-adjusted rate of return on capital.

For those scholars who consider capital flight as a serious threat to sustainable development, academic work has been spread between measuring the phenomenon, examining its channels, and identifying its origins. One can summarize the main variables that influence capital flight around endogenous «push» factors and exogenous «pull» factors, whether these stem from the country's economic and socio-political systems, or from the magnet of the global economy.

One of the earlier efforts is the pioneer work of Bhagwati and Krueger in 1974 analyzing the impact of capital flight on domestic savings and investment. Walter (1986) focused on the mechanisms of capital flight, i.e., how to get the money out via false invoicing of trade transactions, smuggling, and so-called parallel loans.

A number of scholars aim to identify the root causes of capital flight, whether

	Push factors	Pull factors
Political and institutional factors	Political upheaval; social instability.	Opacity and laxist banking regulatory framework; accommodative financial policies.
Macroeconomic factors	Low or negative real interest rates, overvalued exchange rates, inflationary pressure; capital account liberalization; rising external indebtedness.	High interest rates, strong and stable exchange rates.
Microeconomic factors	Banking undercapitalization, liquidity crisis, institutional weaknesses of the financial system; rise in corporate income taxes, unregulated financial systems.	Strong asset management competitive advantage; dynamic offshore financial systems, offshore tax havens.

these causes have to do with the exporting country (bad policy management) or with the global economy (exogenous shocks, international rates of interest differentials). Capital flight as a by-product of bad macroeconomic policies condenses the IFIs' view point, i.e., the consequence of non-market based policies such as unsustainable deficits, inflation and price misalignment. For the IFIs, capital flight shrinks the tax base and exacerbates the shortage of development finance: «The developing world is full of examples of costly attempts to bail out troubled banks, finance budget deficits and adjust the balance of payments by means of discretionary monetary policy. This practice has led to very high inflation episodes, massive capital flight and financial system troubles, leading to slow long-term growth and low policy credibility» (Calvo: 2001).

With regard to exchange rate mismanagement, Shatz and Tarr (2000) investigated the effects of real exchange rate misalignment and found a strong correlation with capital flight: «rate overvaluation can reduce economic efficiency, misallocate resources, increase capital flight, and most

perniciously, lead to exchange and trade controls» Cuddington (1987) concluded that overvaluation of the exchange rate, and presumably fear of imminent devaluation, was an important cause of capital flight in Mexico: «By increasing their holdings of foreign assets, domestic residents secure a good hedge against the foreign exchange risk being incurred by the government, as well as a hedge against domestic inflation or higher taxes».

Several scholars broaden the range of explanatory variables to include socio-political factors. Thus, Henry (1986) found significant causes of capital flight in external debt, real interest rate differentials and the level of social instability. Alam and Quazi (2003) suggest that capital flight from Bangladesh has to do with political instability coupled with increases in corporate income taxes, higher real interest rate differentials, and lower GDP growth rates. Le and Zak (2001) conclude that political risk is the most important factor causing capital flight for a panel of 47 LCDs over 16 years. Hermes and Lensink (2000) as well as Alesina and Tabellini (1988) find that policy and political

uncertainty, measured by budget deficits, taxes and inflation, have a significant impact on capital flight.

The combination of extensive external borrowing, poor economic policy management, and political upheaval, is likely to trigger the recycling of capital inflows outside the borrowing countries. Thus, Boyce and Ndikumana (2001 and 2002) suggest that capital flight is positively related to external borrowing, hence debt-fueled, in 30 sub-Saharan African countries. Capital flight is thus both a symptom and a source of debt problems (Gerth, 1986). The reason why foreign debt triggers capital flight is two-fold. External debt increases domestic liquidity, and high debt is also a signal of high future taxes, hence an incentive for residents to move their money out of the country. This is also the conclusion of Quazi (2004) who finds the inflow of foreign debt in Bangladesh has significantly contributed to the flight of domestic capital. Other scholars look at a reverse causality between capital flight and external debt, namely, the former fuels the latter. Christensen and Kapoor (2004) as well as Baker and Nordin (2004) consider that huge capital flight from developing and transitional economies, roughly US\$ 500 billion per year, compels many of these countries to incur debt on the financial markets to fund capital expenditure that would otherwise be less expensively funded from tax revenues (Christensen and Kapoor, 2004). They conclude that the shadowy underside of the global economy conspires to undermine growth and poverty reduction.

Other scholars have focused on the economic determinants of capital flight in the global economy that works as a «magnet» for foreign capital (Cuddington,

1986). Exchange rate overvaluation is often considered a prime determinant together with high interest rates and conducive tax laws in the United States that together exacerbate capital outflows (McLure, 1988). Christensen and Kapoor (2004) identified capital outflows as one of the costs associated with financial liberalization in a global economy where the offshore finance and tax avoidance industry is booming. They suggest that, under the IFIs's policy recommendations to implement the trade and fiscal liberalisation agenda of the Washington consensus, attracting foreign investment and opening the capital account sharply increase opportunities for capital flight.

5. Measuring capital flight

Measuring capital flight, its volume and its evolution, clearly depends on the definition one adopts of the phenomenon. We briefly describe each of five main approaches that can be organized around two categories, namely, stock and flow approaches.

- In the flow category, the narrowest measure is the «errors and omission» line of the balance of payments, i.e., a reasonable proxy to represent unrecorded capital movements. This relies on the capital account of the balance of payments. However, the net errors and omissions item is a residual category needed to ensure that all debit and credit entries add up to zero in the balance of payments (IMF, 2005). It is thus an offsetting mechanism to the understatement or overstatement of the recorded components. It reflects statistical inconsistencies in the recording of the transaction entries; hence it captures



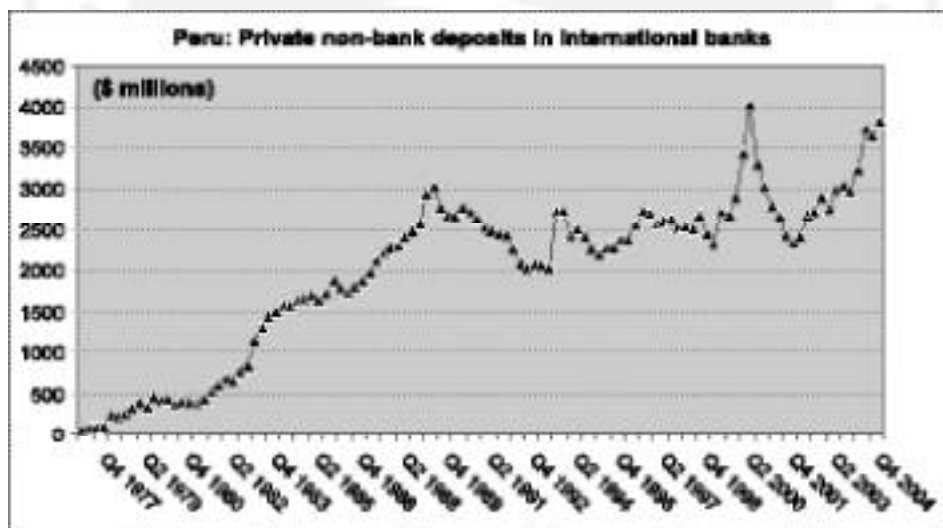
capital flight resulting not only from over/under invoicing of trade transactions but also from accounting errors. The following graph illustrates the evolution in Peru's errors and omissions between 1977 and 2005.

- A wider definition would consist in measuring the flows of short-term private capital added to the errors and omissions item in the capital account of the country's balance of payments; hence highlighting the fact that capital flight takes the form of speculative «hot money». A similar approach focuses on a narrower measure, namely, accumulated short-term capital outflows of the private, non-bank sector (Cuddington, 1986). This method may underestimate domestic holdings of assets abroad because it does not take into account the capitalized investment income these generate in foreign banks. Besides the flow of private capital held abroad, capital flight expands by the flow of receipts kept abroad and not recorded in the balance of payments accounts, i.e., by the average external rate of interest times the accumulated nonbank private assets. Hence Cuddington's inclusion of the compounding effect of an average rate of interest applied to the stock of expatriated assets.
- A third method adopts a stock approach to capital flight. It focuses on the stock of nonbank private external deposits in the international banking system. This is the method adopted by the IIF (Bethune 1984, Bouchet, 1986). The working hypothesis is that a significant increase in the rate of private capital outflows will be reflected in a significant increase in the rate of accumulation of non-bank external assets as reported by the BIS. The BIS Quarterly Review is a regular BIS publication which was started in 1974. In addition, the US Treasury Department provides data regarding private nonbank deposits in US banks. This method is simple and straightforward and it has several advantages. It relies

on a creditor-reporting system rather than a debtor-reporting system, the former being considered more reliable than the latter, in particular regarding capital leakages⁵. The lag for obtaining data from the BIS is only three months, compared with as much as nine months for balance of payments. The accuracy and comprehensiveness of the debtor-reporting systems in many emerging market countries is less than optimal. In the case of countries such as Ivory Coast, Nigeria, Angola, Mozambique and Nicaragua, the lag for balance of payments reporting can amount to as much as two years. One problem with the BIS banking statistics as a source of capital flight monitoring is the effect of valuation adjustments on the net flows of assets. The BIS has taken this problem into ac-

count and publishes both amounts outstanding as well as exchange rate adjusted changes in stocks. The following graph illustrates the evolution in the stock of Peru's private deposits in international banks over the 1977-2004 period.

- A fourth method has been developed by Morgan Guaranty. It defines capital flight as the reported and unreported acquisition of foreign assets by the nonbank private sector and certain elements of the public sector. This is a very expansive definition, including trade credits and working capital lines of local companies (Morgan Guaranty Trust Company, 1986). Morgan Guaranty uses a «residual» approach calculation: it estimates net capital flight indirectly based on the accoun-



5. Using a creditor-reporting system, an assessment of capital flight from Mexico was conducted by the US Internal Revenue Service and the US Commerce and Agricultural departments in 1986, including CDs, passbook accounts,

Treasury bills, commercial paper, stock, bonds, and real state assets (Mexico: the exodus of wealth. *Journal of Commerce*. October, 24, 1986. Page 12-A.

ting principle that the balance of payments should balance between capital inflows and outflows. This is also the method used by Rodriguez (1987) in his estimates of capital flight in Latin America. Hence, capital flight is the counterpart of net FDI inflows plus increases in debt on one side, and the current account deficit plus reserve accumulation on the other. Any difference should stem from the unrecorded build-up of private nonblank assets overseas. A somewhat similar balance-sheet method is adopted by Boyce and Ndikumana (2002) who take capital flight as a measure of private external assets, and who calculate net external assets as the difference between private external assets and public external debts.

- A still more comprehensive measure is to encompass all gross private capital outflows. There are calculated by subtracting from reported changes in external indebtedness, the current account deficit, net inward direct and portfolio investment, as well as changes in net international reserves and in net foreign asset of commercial banks. The methodology implied by this definition also captures capital flight as a residual. It has been used by the IMF to tackle total investments abroad by private and public residents (Luke, 1986). This approach focuses on those capital outflows based on the desire to place assets beyond the control of domestic authorities. These external assets will not generate investment income in the exporting country's balance of payment's current account. This approach is used by Khan and Haque (1987) of the IMF to come to grips with the difference between «normal» in-

terest income and what can be derived by the accumulated stock of external private assets. This is also the empirical approach used by Dooley of the IMF (1986), namely; «the stock of claims on non-residents that do not generate investment income receipts in the creditor country's balance of payments data». This measurement method tackles capital flight from the increase in external claims that yields no recorded investment income.

6. Capital flows and corruption: unsuspected bedfellows

Corruption, (from the Latin *corruptio* = decay), is one of the key criteria for assessing the quality of governance, along with transparency and the rule of law. The World Bank has a short and straightforward definition of corruption: *it is the abuse of public power for private benefit* (Bardhan 1997, and Tanzi 1998). This refers to the exchange and delivery of public services for payments, privileges and undue compensations. In a way, something public (license, contract, tax break, subsidies, market share, bidding rights...) is exchanged or sold for private gains (speculation, insider information, contractual privileges, cash payment, monopoly position...). At the root of corruption is an arbitrary decision that translates into unfair comparative advantage. To broaden the scope of corrupt practices, we define corruption as rent-exacting power by public agency officials with a view of exchanging discretionary public preferences for private gains. It involves a patron-client relationship.

While capital flight has received little attention until recently, its relationships

with corruption has received even less attention in academic and professional circles. There is a large flow of research that looks at capital flight as a portfolio issue, with residents arbitraging between local and international assets based on their relative expected risk/return. Thus capital flight stems from an almost endless number of domestic and external push/pull variables, including interest and exchange rates. Little, however, comes to light regarding the overall economic, socio-political and institutional environment in the home country that might trigger capital outflows. Governance is not considered as a «push factor».

Likewise, there is an impressive cohort of research papers that investigate the relationships between capital inflows, whether they stem from private or public sources, and corruption. The reason why capital inflows and corruption attract more attention is that NGOs and OECD countries' parliaments and thinktanks have raised concern that IFIs and Paris Club lending does not discriminate between good and bad governance. Growing attention is also devoted to comparing the direction of private and official flows, to detect whether private creditors and investors incorporate explicit governance criteria in risk-taking strategies. Recently, Gros Lambert and Bouchet (2006) broaden the analysis of capital flows and corruption to include both private and public flows, development aid and loans, as well as portfolio and equity investment.

Little work, however, has been done on the relationships between corruption and capital flight, and on capital flight as a useful early warning indicator of country risk. The Commission for Africa assumes a likely link between corruption and

capital flight and it suggests measures to enhance laws and practices in both developing and developed countries (Williams, 2005). Bai and Wei (2001) find that bureaucratic corruption makes formal tax collection more difficult, and as a result: «the government has difficulty in collecting revenue through formal tax channels and hence has to rely more on capital controls and financial repression». Private investors choose an optimal allocation between capital flight and domestic investment, taking into account the tax and capital control. Collier, Hoeffler and Patillo (2001) analyze capital flight from 43 emerging market countries throughout the 1980s period. They find that corruption measured by the Institutional Investor Risk Guide (ICRG) index is positively related to capital flight, controlling for a set of economic variables.

There are at least four reasons why the relationship between capital flight and corruption deserves a deeper focus of attention.

- First, including corruption within the possible root causes of capital flight might cast light on those countries that are excluded from the country panels of academic research given that they do not fit with the expected criteria of policy mismanagement, overvalued exchange rates and political instability.
- Second, capital flight might be triggered by corruption as the latter is one of the components that makes the political and regulatory environment conducive or not to private investment and savings mobilization. The lack of a hospitable saving and investment climate might have little to do with exchange rate overvaluation, temporary

ly negative real rates of interest, or macroeconomic mismanagement. Corruption and lack of transparency might also be powerful push factors that lead to capital leakages. When government officials loot the country's assets, when savers do not trust the legal, banking and regulatory frameworks, and when the political and economic system is so volatile that investors fear their assets might be confiscated or subject to arbitrary decisions, capital flight will rise. The negative impact of corruption on the investment climate is well documented in the academic literature (Bouchet and Gros Lambert B., 2003). Tanzi (1998) points out that corruption distorts markets and incentives, and it is therefore likely to reduce economic efficiency and growth. Shleifer and Visny (1993) observe that corruption tends to encourage monopolies, and to prevent market-based competition and innovation. Consequently, corruption would tend to lower economic growth. Leite and Weidmann (1999) also observe that countries which rely heavily on natural resource exploration are more likely to feed corruption, as high rent activity tends to foster rent-seeking behaviour. They conclude that the existence of corruption, particularly in resource-rich less-developed economies, always reduces growth, hence calling for institution-building and stricter rule enforcement. Mauro (1995) finds that corruption lowers private investment, thereby reducing economic growth.

- Third, endemic corruption can prevent or delay the implementation of anti-money-laundering standards, along with the necessary legal and law-en-

forcement systems (Platt, 2005). The latter have been strengthened in the late 1990s and early 2000s with a number of conventions and official measures adopted by the IFIs, the UN and the OECD, as well as by the OECD government. The most well-known is the Financial Action Task Force which has been set up in 1989 and which has adopted 40 recommendations to fight corruption and money-laundering. Analyzing capital flight behaviour since 1990 until today is thus a priority.

- Fourth, as corruption generates an income flow that is illegal, it makes sense for those who benefit from corrupt practices to expatriate their assets outside the country. «Centrifugal forces» thus work both ways regarding the impact of corruption on capital leakages: first, corruption is a «push factor» since it works like a tax on private savings. Private agents who do not trust corporate and official practices due to corrupt practices and bad governance export their assets to safer places. Second, corruption generates private financial assets that cannot be invested securely in the home country and so leak outside the national authorities' grips.

All in all, one can assume that corruption combines two kinds of centrifugal forces for capital leakages: corruption-driven money leaves a country because of fear of being caught by the tax and judiciary authorities; in addition, money leaves a country because of fear that a corrupt government will not provide a stable and conducive environment for safe savings and profitable investment. The relation between corruption and capital leakages has been recognized recently by

the OECD-based Financial Action Task Force with its new project to analyse the symbiotic relationships among corruption, money laundering and terrorist financing.

In Part II of our research we shall test the following assumption:

- Proposition 1: the higher the level of corruption, the less conducive the national environment for private investment, and the greater the capital leakages.

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