



Lancaster University
MANAGEMENT SCHOOL

Lancaster University Management School
Working Paper
2004/044

**MARKET DISTORTIONS AND THE INFORMAL
ECONOMY: THE CASE OF MOROCCO**

Alaoui Moustain, Fatima

The Department of Economics
Lancaster University Management School
Lancaster LA1 4YX
UK

©Alaoui Moustain, Fatima

All rights reserved. Short sections of text, not to exceed
two paragraphs, may be quoted without explicit permission,
provided that full acknowledgement is given.

The LUMS Working Papers series can be accessed at <http://www.lums.co.uk/publications/>
LUMS home page: <http://www.lums.lancs.ac.uk/>

MARKET DISTORTIONS AND THE INFORMAL ECONOMY: THE CASE OF MOROCCO

by

Fatima-Zohra Alaoui Moustain.

Doctoral Researcher
Department of Economics, The Management School, Lancaster University,
Lancaster, LA 4YX, United Kingdom.

Email: f.alaouimoustain@lancaster.ac.uk

Abstract

This paper reviews the Moroccan experience with financial reforms, suggesting that, while financial liberalisation may be an important factor in the growth process, it is not sufficient in itself to promote productive investment. Increased financial deepening in Morocco mostly benefited government budget deficits and household consumption, essentially because of the absence of appropriate labour regulation and an efficient legal system. This paper therefore investigates the hypothesis that the absence of proper governance experienced by Morocco have stimulated informal, rather than formal activity. The MIMIC methodology used to estimate the size of the shadow economy in Morocco reveals that governance failure resulted in a black economy of a magnitude averaging 37 percent of GDP over the period 1975-2000. Furthermore, budget deficit financing through borrowing rather than tax collection appears to lead to more informal activity. This paper therefore concludes by arguing that reviving private sector investment in Morocco requires reducing government dependence on borrowing to finance its budget deficit as well as the adoption of less stringent labour regulations and a more efficient legal system.

Introduction

Economists' interest in the relationship between financial sector development and economic growth dates back to Schumpeter (1911) who argued that a country's financial system plays a critical role. He contended that the basic services financial intermediaries provide to their economy – mobilizing savings, monitoring managers, evaluating projects, managing and pooling risks, and facilitating transactions- made these intermediaries essential players in fostering technological innovation and economic growth. Goldsmith (1969) and McKinnon (1973) investigated further this relationship on a country-case basis and confirmed that better functioning financial systems, as described by Schumpeter, were supportive of faster growth.

Following this early work, and stimulated further by the McKinnon-Shaw hypotheses concerning the favourable effects of financial sector liberalisation, an extensive empirical literature has emerged recently. Cross-country, industry-level and firm-level investigations have attempted to assess the importance of financial system development as a causal factor in promoting growth. The present study takes up the causality issue in the particular context of financial reforms undertaken in Morocco under the supervision of the World Bank and the IMF.

Evidence to be reported indicates that the link between financial development and economic growth is certainly not tight. The legal, regulatory and competitive structures of the financial sector all appear to be influential. Financial liberalisation has not promoted a surge in private investment nor has it been associated with improved economic growth, essentially because of the lack of proper rules and institutions that support private endeavours. The purpose of the study, therefore, is to draw on Morocco's experience with financial and structural reforms in order to cast light on the importance

of the governance issue, exploring the impact of appropriate governance on the economic performance of the country.

The first part of this paper reviews briefly the literature on financial development and economic growth, describing the main proposed mechanisms supporting the finance-growth causality. This is followed by an assessment of the reforms Morocco has conducted in its financial sector and then by an evaluation of the impact of these reforms on the economic growth of the country. A review of major development and economic indicators is provided, then responses to a questionnaire addressed to Moroccan bankers to clarify their reactions to financial reforms is provided in section 4. Conclusions emerging from the questionnaire lead us to believe that inappropriate governance may partly explain the stagnation of private investment in Morocco. The final part of the study therefore examines the hypothesis that inadequate governance and high real wages tend to stimulate informal activity, thus adversely affecting private sector formal investment.

I. Financial development and economic growth

Extensive theoretical work exists on the relationship between financial development and economic growth¹. Levine (1997) summarises the basic theoretical framework of the finance-growth nexus as follows. Financial markets and intermediaries emerge as a result of market frictions to facilitate risk management, mobilize savings, acquire information about investments, allocate resources to their best use, and boost technological changes. These basic functions affect two main channels to growth, namely capital accumulation and technological innovation, which in turn impact economic growth. Consequently, financial repression, especially when combined with

¹ The purpose of this section is not to provide a comprehensive review of this extensive literature but rather merely highlight some of its main contributions. See Levine (1997) for an extensive survey of the relevant literature.

high inflation, can seriously impede growth. However, economists don't all seem to agree on the importance of the role played by finance in promoting economic growth. On the one hand, advocates of financial development such as Schumpeter (1911), Goldsmith (1969) McKinnon (1973), and Shaw (1973) argue that a country's financial system plays a critical role in allocating resources and promoting economic growth. As one of the early supporters of financial liberalisation, Schumpeter (1911) views financial institutions as key players in the process of economic growth because they are deemed to be able to evaluate and finance entrepreneurs who initiate innovative activities and bring new products to the market. Because it limits the services that financial systems can offer to savers, entrepreneurs and producers, financial repression impedes innovative activity and therefore slows down economic growth.

Following the same line of reasoning, McKinnon (1973) and Shaw (1973) have developed growth models where economic development is accelerated by financial liberalisation and development. They argue that growth in financially repressed economies is constrained by low levels of savings and poor allocative efficiency of credit. Financial repression reduces the flow of funds to the financial sector and channels resources towards weakly productive investment projects. This causes a drop in the rate of growth and restrains the expansion of the financial sector. McKinnon (1973) also suggested that because investment expenditures are lumpier than consumption expenditures, financial development helps overcome the relative lumpiness of investment expenditures because it allows investors to have access to larger pool of savings mobilised by the financial intermediaries to finance their investment. Consequently, those bigger projects that would have been impossible to finance otherwise can now be undertaken as a result of financial liberalisation.

On the other hand, sceptics led by Robinson (1952) question the importance of finance in the growth process and believe that financial development rather occurs as a result of economic development. Where the importance of finance is not completely denied, as from the part of Lucas (1988) who believes that the “importance of financial matters is very badly over-stressed” in attempting to explain economic development, it is confined to a lesser role by Robinson (1952) who argues that “where enterprise leads, finance follows (...) When a strong impulse to invest is fettered by a lack of finance, devices are invented to release it (...) and habits and institutions are developed accordingly.”

The 1990s have witnessed a renewed interest in the empirical investigation of the relationship between finance and growth. Significant empirical work has been done to demonstrate the positive relationship between financial development and economic growth. King and Levine (1993) empirically assess the connection between banking sector development and the sources of economic growth. In this paper that sets the ground for most of the subsequent research on the topic, they test the correlation between the level of financial development and economic growth using data on 80 countries over a period ranging from 1960 and 1989. They investigate whether financial development predicts long-run economic growth, capital accumulation and productivity growth using four indicators of financial development that measure respectively the size of the formal financial intermediaries sector relative to GDP, the importance of banks relative to the Central Bank, the percentage of credit allocated to private firms, and the ratio of credit issued to private firms to GDP. They control for other factors associated with economic growth using a matrix of conditioning information that includes indicators of initial income, education, trade and monetary policy, political stability. They find that the

different indicators of financial development included in the study are positively and significantly correlated with economic growth.

Several subsequent studies have built on King and Levine's (1993) article to further investigate the relationship between finance and growth. The body of evidence tends to suggest that the link between financial development and economic growth is a strong positive one, and that differences in financial sector development may help explain differences in economic development across countries. Still, these empirical studies don't put an end to the discussion on causality between financial development and growth. Actually, some argue that the strong relationship between finance and growth stem from the fact that finance merely anticipates growth. Financial institutions for example may be lending more because they expect a given sector to grow in the near future. Hence, we still need considerable research into the mechanisms through which financial sector development affects growth to assess the strength and the direction of the causality between financial development and growth.

Recent empirical studies have re-examined the empirical evidence on the relationship between financial development and economic growth and have established that the results obtained from the earlier studies become weaker when estimated using panels² or when restricting the sample to developing countries only. Besides, the direction of the causality is still subject to debate several years after McKinnon (1988) acknowledged that "although a higher rate of financial growth is positively correlated with successful real growth, Patrick's (1966) problem remains unresolved: what is the cause and what is the effect? Is finance a leading sector in economic development, or does it simply follow growth in real output, which is generated elsewhere?" Still,

² Khan and Senhadji (2000), Favara (2003), Trabelsi (2002)

financial sector reforms were made an integral part of the reform package applied to Morocco by the World Bank and the IMF. Whether these reforms did bring macroeconomic stabilisation and economic growth to the country is investigated in the next section of this paper.

II. Financial Sector reforms in Morocco

The late 1970s and early 1980s involved economic instability in Morocco, as in most developing countries. Budget deficits were very large, inflation reached record levels and external debt came to exceed GDP. By the mid-1980s, the country was in the throes of a severe macroeconomic crisis that triggered the implementation of a comprehensive structural adjustment program. Supervised and financed by the IMF and the World Bank, this program's purpose was to restore the country's macroeconomic stability. The reform plan had two components, a general adjustment program under the supervision of the IMF and a sectoral adjustment program designed by the World Bank. The IMF program, which spread over a period of five years and was divided into three eighteen-month duration stand-by arrangements, aimed primarily at reducing both the country's current account and fiscal deficits to 4 percent of GDP by 1986. Annual GDP growth targets were set at 3 percent and the country was strongly encouraged to avoid recourse to external borrowing to prevent excessive pressures on the balance of payment and the treasury. On the other hand, the World Bank program covered a wider range of sectors and had as a primary target to liberalise prices and eliminate price subsidies. Trade liberalisation was also on the World Bank's agenda which hastened devaluation of the Moroccan Dirham by 50 percent against the French Franc and the Deutschmark and by 30 percent against the US Dollar and the British Pound at the start of the reforms. Measures to reduce tariff and non-tariff barriers led to a progressive opening of the

economy to international competition and imports were gradually deregulated. By 1993, the financial sector was incorporated into the adjustment process and major reforms included interest rate liberalisation and credit ceilings elimination. Before the reform process, the primary role of the financial sector was to respond to the financing needs of the government and of public sector enterprises, as well as to grant credit at preferential rates to government-defined priority sectors. As a significant source of money creation, credit to the private economy was tightly controlled to comply with the money growth objectives established by the government. Credit control devices and mandatory asset holdings in the form of required reserves, “Plancher d’Effet Public”, (PEP henceforth, which is the minimum portfolio of T-bills banks were required to hold), CNCA (Caisse Nationale de Crédit Agricole) 1-year deposit notes and 1-year maturity T-bills were enforced to control bank intermediation.

In addition, the monetary authorities intervened heavily to promote the financing of specific sectors of the economy deemed crucial to the development of the country. Their objective was to induce banks to grant priority financing to support four main sectors of the economy, namely small and medium-sized enterprises, the export sector, the agricultural sector, and the housing sector (especially the low-income segment, or *logement économique*).

Finally, financial intermediation was identified as one of the key strategic sectors and foreign investment in it was subject to tight restrictions and/or approval by the monetary authorities. The “Moroccanization” decree of 1973 limited foreign ownership to 49 percent to ensure local control.

This was the context in which, from the early 1990s, the country undertook a series of financial reforms. The claimed overall purpose was to relax most, if not all, of

these restrictions and thus allow the financial sector to promote economic growth through a more efficient allocation of credit. The reforms targeted first the banking sector and monetary policies (1991-1995) before turning to the stock and bond markets in 1996 and more recently, beginning in 1998, to savings institutions.

The first step of the reforms consisted of increasing administered domestic interest rates to positive real levels prior to their gradual full liberalisation. Deposit rates were first targeted by the reform in July 1990, shortly followed by medium and long-term lending rates in October 1990 and short-term lending rates in January 1991, although interest rate liberalisation was not fully effective until February 1996. The minimum lending rate, the “Taux de Base Bancaire” (TBB) has been set since January 1998 at 8 percent for short-term loans, 8.25 percent for medium-term and 9 percent for long-term loans. This rate, which could be seen as a “prime-rate”, has also been set at 8 percent on export loans since October 1997. Banks’ loans are also subject to a maximum “usury” rate, the “Taux Effectif Global” (TEG) which is set by the Central Bank every 6 months and which was around 15 percent in 2000. In view of the low level of inflation typical of the period since 1996, however, the usury rate has not been a significant constraint on bank lending policies. The general, if uneven, decline in the underlying rate of inflation is portrayed in Figure 1.

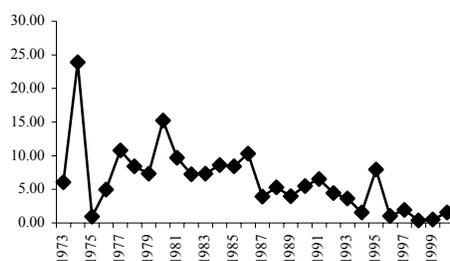


Figure 1: GDP Deflator (% annual change) 1973-2000; (source: World Bank)

The mandatory holdings of T-Bills and bonds issued by development banks were gradually relaxed during the reform period. The 35 percent T-bills PEP requirement was steadily reduced to reach 5 percent in January 1998 before being completely abolished in July of the same year. Since November 1991, banks have been required to keep 2 percent of their total liabilities (excluding term deposits and deposits in convertible Dirham) in the form of CNCA notes, down from 3.5 percent during the pre-reform era.

To increase competition among banks, the government opened some banks' capital to private participation, both domestic and foreign, enhanced banks' authority in lending decisions and annulled the "Moroccanization" decree of 1973 which restricted foreign ownership in strategic sectors to 49 percent. Consequently, foreign ownership in Moroccan banks has become widespread and several foreign banks currently hold majority control in major Moroccan banks. The French Société Générale, BNP Paribas and Crédit Lyonnais hold majority control in SGMB, BMCI and CDM respectively, AXA controls 20 percent of BMCI and 10 percent of BCM, and Crédit Agricole-Indosuez holds 14.6 percent of Wafabank.

The reform program also included policies intended to reduce the role of the state in the management of banks. A vast, comprehensive program of privatisation was launched in 1994 and more than sixty state-owned enterprises have been privatised since the start of the reforms, including four banks in 1995. However, four banks still remain under the control of the state but only one is currently profitable. The Crédit Populaire Marocain (CPM) group is the uncontested banking sector leader, accounting for 30.26 percent of total bank deposits and 21.34 percent of extended credit by 2002. The government launched the privatisation of the CPM in 2002 by relinquishing 21 percent of the CPM to the regional Banques Populaires. This was to be followed by the sale on the

stock market of the government's remaining 20 percent share by the end of 2003. Conversely, the other three state-owned banks have colossal loans in arrears attributed by observers to corruption and inefficient management practices at these institutions, which have forced the authorities to launch restructuring programs in conjunction with the other commercial banks to prevent a banking sector crisis.

In addition, and to comply with international standards on banking regulations, banks were required to meet the prudential ratios designated by the Basle committee. The major prudential rules with which banks must comply today include:

- 100 percent liquidity ratio between liquid short-term assets and short-term demand liabilities;
- 8 percent solvency ratio between the bank's own funds and assets and contingent commitments, weighted by risk;
- 10 percent of net capital maximum concentration of risks and large exposures calculated for one beneficiary and weighted by a risk factor; and
- A 16.5 percent reserve requirement as a fixed proportion of demand liabilities excluding convertible-Dirham accounts and CDs with an initial maturity exceeding 3 months. (This ratio was raised from 10 percent to 14 percent in December 2002 then 16.5 percent in September 2003, and reserves are now remunerated at 0.75 percent interest).

The financial reforms also targeted the moderately active stock market starting 1996. Besides restructuring the already existing stock market, the new legislation created several regulatory bodies, strengthened the institutional framework for bonds and money markets and instituted new collective investment schemes in the form of FCPs and SICAVs, two forms of unit trusts.

III. The Impact of the Reforms

Following the reforms, financial intermediation activity has certainly experienced relative expansion. The ratio of M3 to GDP rose from 61 percent to 82.6 percent between 1990 and 2000, indicating banks' ability to mobilise more savings. In regional terms, it may be noted that while this ratio exceeds that observed in Tunisia, it remains well below that of Jordan (113.4 percent of GDP in 2000). As Figure 2 shows, Morocco's monetisation ratio now approximates that in Egypt.

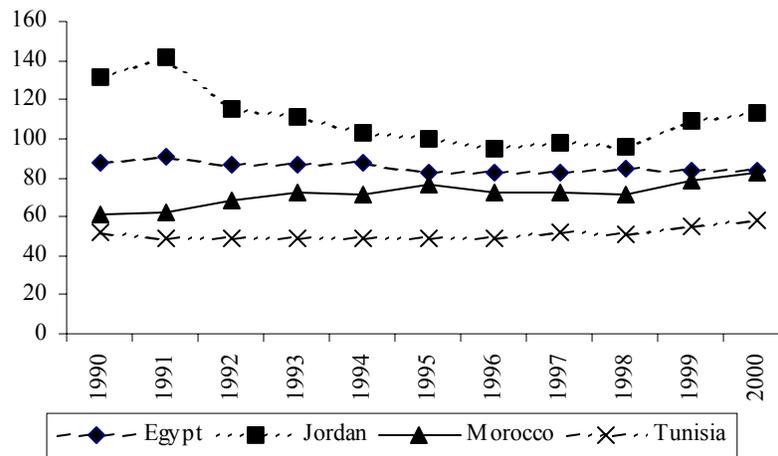


Figure 2: M3 to GDP ratio for selected MENA countries, 1990-2000

(Source: World Bank)

Similarly, bank deposits have increased from around 45 percent of GDP to 70.5 percent in the period since financial deregulation. These were considerably fuelled by significant workers remittances, which in turn averaged 6 to 7 percent of GDP annually since the 1980s. These remittances, which currently make up one fourth of total bank deposits, and which show no sign of slow down in the near future, along with the

currently limited proportion of the Moroccan population having access to banking services³, present further potential for these deposits to continue to grow in the future.

Bank credit on the other hand, increased significantly since the start of the reforms, amounting to 92 percent of GDP in 2000, up from 62 percent in 1990. Among the objectives to be achieved by the financial reforms was the reallocation of credit away from the public sector and towards the more productive private sector. Consequently, the share of domestic credit allocated to the private sector reached 58 percent of GDP by 2000. This ratio nonetheless remains below the 66 percent of GDP witnessed in Tunisia and the 78 percent observed in Jordan (Figure 3).

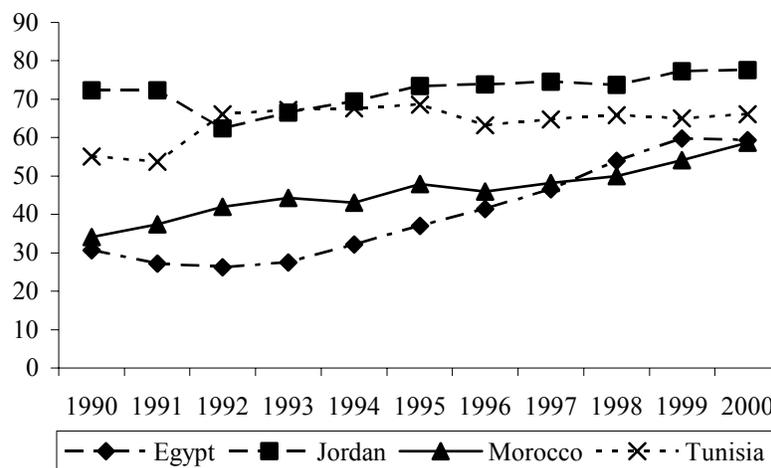


Figure 3: Domestic credit to the private sector in selected MENA countries, 1990-2000

(Source: World Bank)

As noted in the previous section, financial reforms also targeted the stock market. The remodelling of the tax system, the opening of the economy, the adoption of reliable accounting standards and the reform of the banking sector were intended to promote the emergence of a more active market for equities. However, after a strong expansion resulting essentially from privatisation initiatives, the capitalisation of the Casablanca

³ Only about 20 percent of the Moroccan population use banking services

Stock Exchange experienced a sharp decline starting 1998. This decrease is thought to be associated with 1) a limited number of initial public offerings of non-financial enterprises, 2) a decline in the number of securities issued, which restricts diversification opportunities, and 3) a deterioration of investors confidence, the combination of which has led to an extremely low volume of trading (Figure 4).

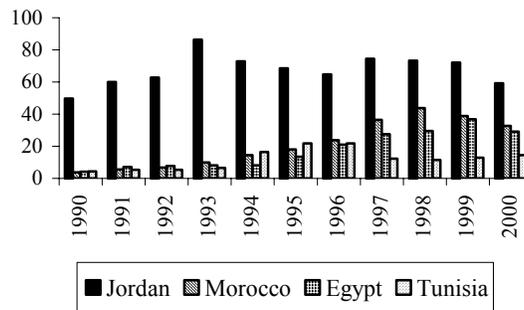


Figure 4:Market Capitalisation (% of GDP) for selected MENA countries, 1990-2000;

(source :World Bank)

Despite the changes described above, little impact on the real economy has been evident subsequently. The impact of financial sector reforms on subsequent economic growth is difficult to assess as several factors other than the level of financial sector development may have interfered with the evolution of some economic indicators. GDP annual growth has been very erratic over the past 10 years, largely as a result of several consecutive years of severe droughts⁴. Figure 5 below clarifies this relationship and indicates that fluctuations in agricultural output have been somewhat less dominant in determining GDP growth since 1997.

⁴ Over the 1990s, the country was hit by 6 droughts in 10 years.

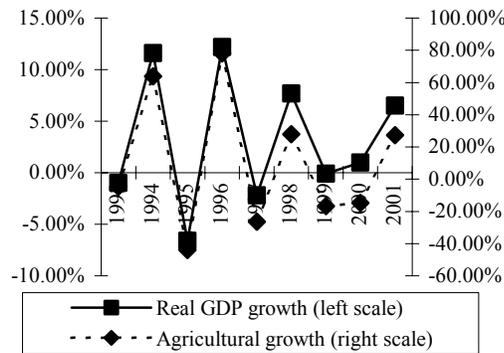


Figure 5: Agricultural and non-agricultural real GDP growth rate for Morocco, 1990-2000

(source :World Bank)

Nevertheless, Morocco remains a dual economy with both a growing modern sector and a still very large agricultural sector which employs 50 percent of total labour force to produce 16 percent of GDP. GDP per capita has stagnated over the past decade, averaging \$1370 in 2000, thus remaining well below the performance of countries such as Tunisia where it has been growing at a much faster rate over the past 10 years (Figure 6).

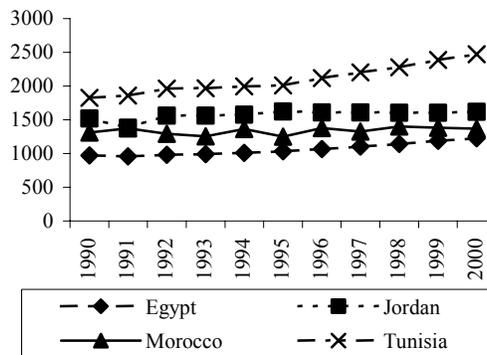


Figure 6: GDP per capita for selected MENA countries, 1990-2000

(source :World Bank)

All in all, and despite noticeable financial sector development, Morocco's growth performance remains below expectations, as if the country failed to put its financial performance at the service of overall growth over the past decade. Indeed, aggregate data

suggest that financial resources accumulated since the reforms were not directed towards the productive private sector. Instead, they appear to have been allocated to a large extent to government budget financing and to non-productive private activities such as consumption and housing.

Accordingly, aggregate data on investment reveal stagnation at around 21 percent of GDP during the period 1990-2000, following lower values associated with drought in the mid-1990s (Figure 7).

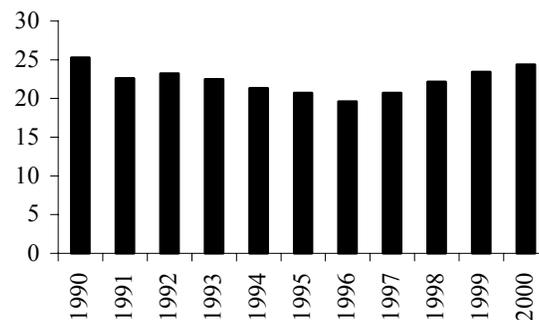


Figure 7: Investment as a Percent of GDP, 1990-2000

(source: World Bank)

Both public and private gross fixed capital formation (GFCF), as a proportion of GDP remained roughly constant despite strong incentives by the authorities to promote investment. Steps to remove obstacles to the creation of new enterprises were gradually taken over the past few years, culminating in 2002 in the implementation of several *Centres Régionaux d'Investissement* (CRI) in the major cities of the kingdom. These are one-stop investment windows established at the regional level in an attempt to reduce the lengthy and costly administrative procedure of setting up a new business. Ongoing efforts to improve the legal and judicial system were undertaken, along with tax reductions and industrial areas promotion initiatives, all in an attempt to stimulate private

investment and spur economic growth. However, strong rigidities in the labour market have yet to be removed. Hiring and firing regulations are very severe, the urban minimum wage remains high and is further aggravated for employers by even higher non-wage labour costs (for example, social security contributions and company income taxes). Added to a lack of domestic competition and to an inefficient legal system, these rigidities suggest continuing impediments to private investment activity (Figure 8).

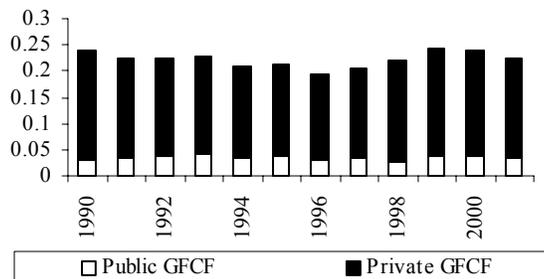


Figure 8: Gross Fixed Capital Formation (%GDP), 1990-2000

(source :World Bank)

Aside from particular years such as 1995 and 2000, where budget deficit reached 5.2 percent and 8.8 percent of GDP respectively, the government have managed to keep fiscal deficit around 4 percent, owing essentially to exceptional privatisation receipts (Figure 9).

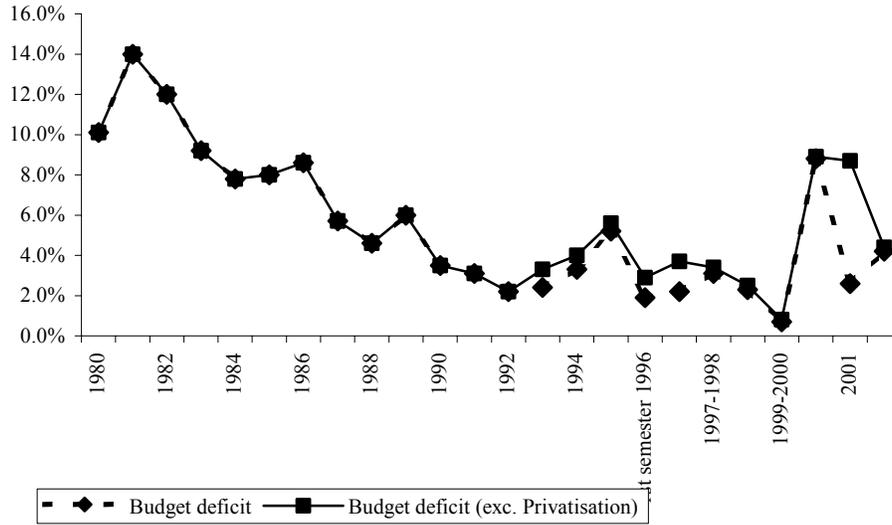


Figure 9: Moroccan government budget deficit, 1980-2001

(source :Ministry of Finance)

Traditionally, budget deficits were financed by the accumulation of considerable external debt and through the control of bank resources. With the reforms, the government is now able to reduce its dependence on external sources of funding and instead finances its deficit borrowing from a wider variety of domestic sources as financial markets expand and more financial assets are now available. Consequently, the country's external debt decreased considerably over the past decade to reach 34.6 percent of GDP in 2002, essentially as a result of a debt swap program launched in 1996 with members of the Paris Club along with early repayments of the most expensive debt (Figure 10).

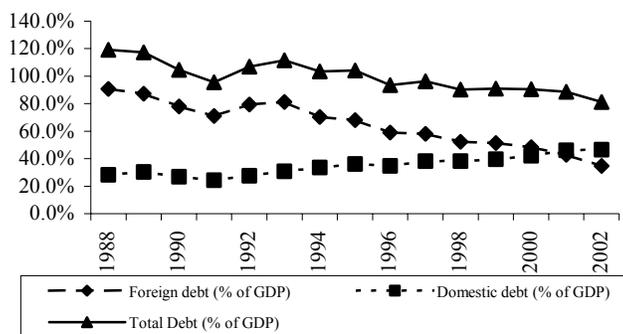


Figure 10: Morocco's total debt, 1988-2002
(source :Ministry of Finance)

A major criticism of these debt swap programs is that they require payment in local currency and hence merely convert foreign debt into a domestic one. Accordingly, Morocco's domestic debt has increased from 34.6 percent of GDP at the start of the debt conversion program to 46.6 percent of GDP in 2002, hence intensifying competition for domestic financial resources. Even though the financial authorities take pride in the fact that they managed to reduce their direct recourse to bank funds since the start of the reforms, they still control a significant proportion of them. Internal debt financing is increasingly dominated by government recourse to T-bills by tender which accounted for 88.7% of debt financing in 2002. However, banks are still the largest holders of these government papers, despite a significant increase in the share of UCITS⁵ and of insurance companies and pension institutions, which implies that banks' overall contribution to domestic financing is still very significant (Figure 11). In fact, 20 percent of total banks' assets are currently held in the form of government securities.

⁵ Undertakings for Collective Investment in Transferable Securities (investment funds in the form of SICAVs and FCPs)

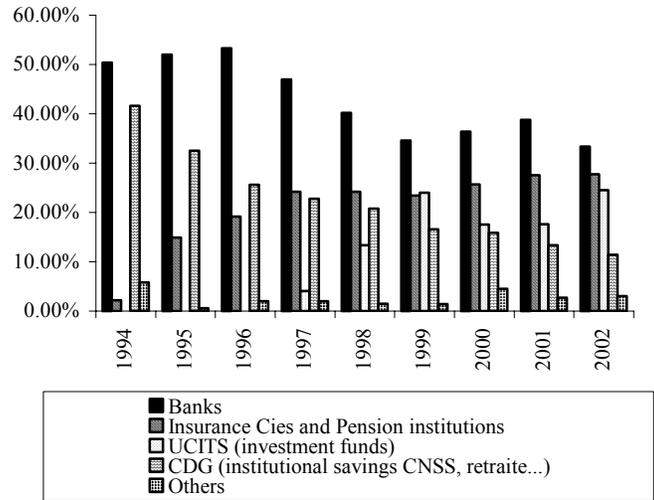


Figure 11: Government securities by holder, 1990-2000

(source :Bank AlMaghrib)

Besides from the public sector, banks have lent increasingly to individuals for consumption and housing purposes at the expense of equipment credit and exports loans (Figure 12).

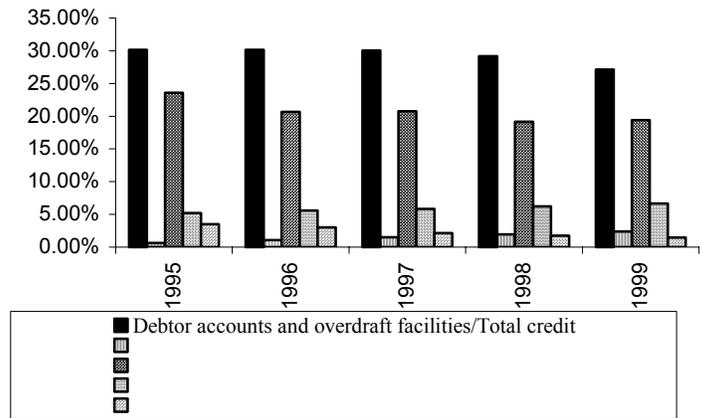


Figure 12: Bank lending according to purpose, 1990-2000

(source :Bank Al Maghrib)

Reforms undertaken over the past two decades may have succeeded in achieving decent macroeconomic stabilisation and increasing financial deepening, but they have failed so far in generating the level of productive investment required to enhance

economic growth. Credit was more often allocated to sustain government's fiscal imbalances and to support households' consumption and housing expenses, than to promote private sector investment initiatives. Banks being the main source of finance in the economy, the next section of this paper attempts to explain these institutions' lending choices since the reforms.

IV. Questionnaire Results

This section summarises the answers from a questionnaire addressed in 2002 to bankers in the eight major Moroccan commercial banks⁶. The questionnaire consists of three main sections, the first one dealing with banks deposits collection strategy, the second one with banks attitude towards lending to the private sector for investment purposes, and finally the third one with the changes required in the business environment to enhance banks' willingness to support private sector investment. Responses to section 2 and 3 are reported below⁷.

First, liquidity does not appear to be a constraint on the Moroccan banking sector. Banks have been quite successful in attracting deposits in view of their expansion since the early years of the financial reforms. These deposits are essentially made up of 1) transfers from Moroccans living abroad⁸, 2) savings drawn away from the stock market to the banking sector as a result of the moribund state of the Casablanca Stock Exchange since 1998, 3) foreign direct investment in the telecommunication sector, and 4) new depositors attracted by the banks' actions aiming at increasing depositors' trust in the banking industry. Commercial banks direct these deposits primarily towards the public sector and the largest private firms of the country. The remainder is then allocated to

⁶ List of banks to which the questionnaire was sent: BCM, BCP, BMCE, BMCI, CDM, CNCA, SGMB, Wafabank.

⁷ Answers to section 1 are available upon request.

⁸ They accounted for 28% of total bank deposits in 2000 (source: GPBM)

consumption/housing related loans and to small and medium-size enterprises, with a residual portion being deposited at the central bank and/or used to buy government papers⁹. Data published by BAM reveal that credit to companies and to individuals (mainly consumption and housing loans) have indeed been steadily increasing over the past decade at the expense of credit to individual entrepreneurs (Table 1).

Table 1: Distribution of bank credit by economic agent

<i>In % of total credit</i>	1995	1996	1997	1998	1999	2000	2001
Companies	59.3	61.1	61.4	60.1	-	61.5	60.5
Individual Entrepreneurs	15.2	13.4	12.1	12.0	-	9.3	9.4
Individuals	14.7	15.2	17.7	19.4	-	26.6	26.9
Local authorities & public administration	2.7	2.7	2.8	2.6	-	2.4	3.2
Miscellaneous	8.2	7.6	6.0	6.0	-	0.2	-

(source : Bank Al Maghrib)

However, answers from the questionnaire reveal that credit rationing is very acute in Morocco. A majority of respondents admit that although Moroccan banks are not lacking resources, and although they could lend more at the current market rate to private investors, they prefer to restrict their lending activity because of the high default risk. Consequently, and although it's been decreasing over the past decade, short term lending remains predominant and is used primarily to finance overdrafts which amounted to 37.6 percent of total commercial bank credit in 2001.

Still, two bankers pointed out that private sector investment lending is also constrained by weak demand resulting from insufficient investment returns in Morocco. Prohibitive cost of capital appears also to be an obstacle to higher loan demand. One respondent mentioned that demand for loans would increase without being more risky if banks managed to reduce interest rates (as well as other costs associated with the loan

⁹ Some bankers admitted that they would prefer to use their excess liquidity to buy government papers or simply deposit it at BAM at very low rates rather than lend it to potential investors that may not repay it back.

allocation process). However, inefficiency problems along with a lack of “serious” competition force banks to keep rates at a higher level and hence deter demand for investment loans.

The answers obtained from the questionnaire are further corroborated by a recent FACS¹⁰ study on the Moroccan manufacturing sector published in 2002 and carried out by the Moroccan Ministry of Commerce and Industry in conjunction with the World Bank. This study reveals that reinvested earnings finance 62 percent of the surveyed firms investment needs, with banks classified far behind as the second source of financing with a low 20 percent. The main reasons highlighted by the study as to why Moroccan businesspeople shun bank lending include the prohibitive amount of guarantees required by banks to secure the loans along with very high interest rates on loans. Banks collateral requirements make it impossible for several promising projects lacking the required guarantees to be financed. In addition, the problems associated with the insolvency of two major specialised banks have significantly increased the proportion of overdue loans in the banking sector to 17.3 percent of total loans by 2000. Because of this surge of loans in arrears, banks are now required to reorganise their lending portfolio and therefore apply more stringent requirements on their loan applicants. Furthermore, and as a result of the low return on investment mentioned earlier, those who can offer the required guarantees do not borrow any more and jam banks with their money, hence creating excess liquidity in the market.

Respondents to the questionnaire were also asked to suggest explanations to the surge in the proportion of loans in arrears in their portfolios. Several reasons were mentioned, including:

¹⁰ Firm Analysis and Competitiveness Survey

- The long and costly legal procedure for judicial collection of bad debts. This procedure can take up to 4 or 5 years and the issue is often uncertain as the borrower can decide to leave the country overnight leaving almost no recourse to the bank. In addition, the bankruptcy reorganisation proceeding described by the current commercial code is detrimental to banks as these are the last ones to get paid back if a firm falls in for bankruptcy with the court;
- The increase in overall risks because of the current economic conjuncture resulting in part from the several consecutive years of severe drought. Coupled with the build up of government delayed payments which put pressure on cash reserves and the treasury of those firms involved in governmental projects, these adverse conditions make it difficult for private firms to keep up with their debt instalments;
- The lack of managerial skills of several firm managers which lead to hazardous cash flow management. In addition, a large proportion of Moroccan firms are under-capitalised, which creates financial disequilibria causing payment difficulties when loan deadlines are to be met;
- The over-indebtedness of borrowers who disregard their actual indebtedness capacity (usually 40 percent of their net revenues) and contract several loans with different banks and financial institutions. This problem is further aggravated by the appearance of new financing devices (leasing, factoring, discounting...) since these don't appear on the financial statements submitted to banks when applying for a loan;
- The lack of information from the part of the banks on a number of variables that may seriously affect the viability of a firm (conflicts with employees,

with the CNSS¹¹ or the tax authorities...). Added to the multiplicity of financial statements firms provide depending on their potential recipient, these information asymmetries hinder banks' ability to accurately evaluate the financial strength of a loan applicant; -Finally, the inefficient risk assessment from the part of banks, coupled with the fact that some bankers favour market share over safer risk management practices as a result of increased competition in the banking sector. Several commercial banks were criticised for their laissez-faire in terms of debt-recovery which may encourage some borrowers to neglect their payment obligations towards their bank.

In light of the problems outlined above, respondents were asked to provide suggestions as to what changes are required in order to encourage banks to extend more investment loans to the private sector. First and foremost, bankers insist on the need for a quick reform of the legal system. They stress the importance of having a legal system that expedites trials and a better protection of creditors' rights if they are to consider extending more loans to the private sector. Bankers also call for efforts on the part of Moroccan firms to upgrade themselves in order to insure their long-run profitability and viability. Besides, respondents require a greater transparency in the accounting reports published by firms to reduce existing asymmetries of information in the loan application process and allow banks to make more informed decisions when granting loans. Finally, bankers advocate for the creation of a department within the central bank that would centralize all available information on the level of indebtedness of borrowers to prevent their over-indebtedness.

¹¹ Caisse Nationale de Sécurité Sociale, the social security body.

In summary, the questionnaire responses suggest that, although liquidity is not a problem in the Moroccan financial sector, banks will limit their lending to the private sector for investment purposes as long as no noticeable improvement in the quality of governance is achieved. Two distinct aspects of the failure of financial development to promote economic growth in Morocco may therefore be identified from the questionnaire results. Firstly, basic economic distortions, notably in the operation of the labour market, appear to have reduced the underlying returns expected on modern sector investment activity. Secondly, institutional weaknesses that affect the security of loans have further reduced the expected returns to creditors of financing these projects.

As an indirect test of the conclusions arising from the questionnaire responses, the following section assesses empirically an inference that may be suggested by them. If the disappointing contribution of financial development to measured economic growth has been due partly to poor underlying profitability, informal economic activity that is less affected by market distortions would be expected to comprise a comparatively large part of overall output (measured and unmeasured). Since such activities would have little recourse to bank borrowing, lending by increasingly liquid banks would become concentrated in the types of loans where collateral and related problems were least pronounced: public sector lending, and consumer and real estate financing in the private sector, as suggested by Figure 12 above.

V. Governance Failures and the Informal Economy

“If public governance is the exercise of authority in the name of the people, good governance is exercising that authority in ways that respect the integrity, rights, and needs of everyone within the state” (World Bank, 2003). A recent World Bank report on governance gaps in the Middle East and North Africa pinpoints the trailing behind in

terms of governance compared to other more advanced regions in the world as one of the main causes behind the slow rate of growth in the region. Because governance determines the nature of policies formulated and implemented, it plays a significant role in setting up the type of business environment conducive of investment and production. When an appropriate investment environment is lacking, alternative solutions emerge to respond to existing market distortions. Since the reforms, Moroccan banks have favoured public sector and household consumption and housing lending at the expense of private sector investment deemed more risky, especially in the absence of a legal system prone to protect creditors' rights. In addition, stringent labour regulations leading to high real wages have reduced firms' return on investment and further deterred private ventures. This section investigates the hypothesis that, as a result inadequate governance, financial liberalisation did not promote higher growth in Morocco. Instead, restrictions resulting from governance failures have stimulated informal economic activity and added to the constraints on formal private investment, hence preventing this sector from playing a significant role in the growth process.

A. Measuring the Size of the Informal Economy

Three methods are most widely used to estimate the size of the hidden economy. The first approach, labelled the direct approach, estimates the informal sector based on either surveys and samples or tax auditing. The main limitation of this method is its dependence on respondents' willingness to cooperate and reveal extensive information on activities that they are by definition trying to keep hidden.

The second approach includes the currency demand approach and the physical input method. The currency approach, initiated by Cagan (1958) and further developed by Tanzi (1983), assumes shadow transactions are conducted using cash to leave no trace

to the authorities. Consequently, an increase in shadow activities will be coupled with an increase in the demand for currency. The Kaufmann-Kaliberda's (1996) physical input method, on the other hand, assumes an elasticity of electricity to GDP close to one. Hence, a difference in the growth of the official GDP and the growth of electricity consumption can only be explained by the growth of the shadow economy.

Both methods have been criticised on various grounds, one of them being that they only account for one indicator of the effects of the informal economy on the formal one or only one determinant, usually the tax burden. However, the impact of the black market is reflected simultaneously in the product, labour and money markets. The third approach, the model approach, therefore corrects for these limitation by explicitly considering the multiple causes as well as the multiple consequences of the shadow economy. Based on the statistical theory of unobserved variables, this empirical method estimates the unknown coefficients in a set of structural equations within which the unobserved or latent variable cannot be measured directly. One variant of this approach is the MIMIC (Multiple Indicators Multiple Causes) modelling¹², which links the latent unobservable variable (here the size of the shadow economy) to observed indicators on the one hand, and to a set of observed causal variables used in the literature as significant determinants of the size of the hidden economy. The MIMIC equations can be written as follows:

$$y = \lambda\eta + \varepsilon \quad (1)$$

$$\eta = \gamma'x + \zeta \quad (2)$$

where η is the latent variable (the size of the hidden economy, a proxy for the quality of governance), y is a vector of indicators of the latent variable, x is a vector of

causes, γ' and λ are vectors of parameters, and ζ and ε are random errors assumed to be uncorrelated. Finally, equation (1) is the measurement model for the latent variable, whereas equation 2 is the structural equation for η . Typically, the correlation or covariance matrix derived from equation 1 is used to estimate the structural coefficients in equation 2. Figures 13 below displays the interrelationships between the latent variable, η , and the set of chosen determinants (x) and indicators (y) for Morocco over the period 1975-2000.

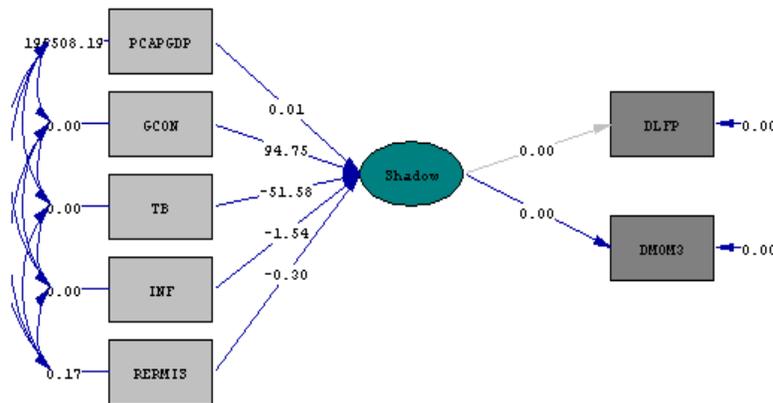


Figure 13: Path Diagram for the Hidden Economy in Morocco

The existing literature has identified a number of indicators and determinants of the shadow economy. The subsequent section reviews those most relevant to Morocco.

1. Determinants and Indicators of the Size of the Shadow Economy in Morocco

There are several causes to the existence and current size of the black economy in Morocco. Influenced by the responses to the questionnaire survey of bank representatives, these are likely to include:

¹² Zellner (1970), Joreskog and Goldberger (1975)

- The stringent labour regulations. These are probably one of the main causes behind the size of the hidden economy in Morocco, and most developing countries for that matter. Governments believe excessive regulations are in the best interest of the workers they intend to protect. However, evidence from Morocco suggests that it's rather the opposite that is happening. The increasing nominal minimum wage¹³ along with the battery of non-wage costs and the difficulty of firing employees have adversely affected demand for unskilled workers which had to turn to the informal sector to get jobs;
- The current financial sector policies and legal system inefficiencies which are blamed for commercial banks' bias towards public sector and large companies financing at the expense of SMEs. Banks are very reluctant to lend to small businesses which are typically considered more risky than large ones. As a result, they require significant collateral to secure loans to small firms, a collateral these firms seldom have. The problem is further compounded by the large proportion of bad debts in most banks' balance sheets, which makes credit rationing more acute. Consequently, small entrepreneurs often need to turn to informal sources to obtain the financing they need to start and operate their business.
- The stagnation of investment, mainly attributable to the two previous causes. As a result, the formal sector is incapable of providing enough employment to a rapidly increasing number of job seekers, especially unskilled ones. The rapidly growing labour force, combined with the volatile and sometimes even negative per capita GDP growth the country has

¹³ The nominal minimum wage has increased by around 6 percent on average over the period 1970-2000 in

displayed over the past decades, and the increasing migration towards the urban areas, have led to unemployment rates reaching 20 percent in urban areas in 2002;

- The large proportion of unskilled labour among the working population. Because working in the informal sector does not require considerable professional skills, many unskilled workers find it easier to get jobs in the hidden sector. Public spending on education has declined significantly in Morocco over the past two decades, down from 7.2 percent in 1983 to 4.8 percent of GDP in 1998, resulting in an illiteracy rate still averaging 50 percent of the population at the end of the 1990s.

- The red tape and bureaucracy which lead to corruption and a total distrust of the state and its regulations. Transparency International 2003 Corruption Index places Morocco at the 70th position, whereas the Economic Freedom of the World Index ranks it 82nd; and finally

- The tax burden which enhances individuals' incentive to operate in the informal sector. Because of poor enforcement and corruption, tax evaders have little probabilities of being caught, which then makes it even more attractive to join the black economy. In addition, Morocco has a very complex tax system which often requires the help of expensive specialised accountants to understand, a help most entrepreneurs can't afford.

The relevant literature also identifies several indicators of informal economic activity. The present study includes two in its estimation of the size of the black economy in Morocco, namely the change in labour force participation rate and the change

in the M0 to M3 ratio. The rationale behind the choice of these indicators is as follows. If an increasing number of workers decide to join the informal sector, the official labour force participation rate should decline. On the other hand, since most transactions in the underground economy are conducted in cash or barter so as to leave no trace to the authorities, the M0 to M3 ratio would be expected to increase over time¹⁴.

In summary, the subsequent estimation of the informal economy in Morocco assumes that the size of the underground market is influenced by

- the level of economic development proxied for by the real per capita GDP (in local currency units);
- the tax burden, as measured by the tax revenues to GDP ratio;
- citizens' discontent with wasteful public expenditures on non-productive activities, proxied for by government expenditure as a share of GDP.
- the inflation rate; and finally
- the extent of real exchange rate misalignment (RERMIS)¹⁵.

The intensity of informal economic activity would then be reflected by

- an increase in the M0 to M3 ratio; and
- a decline in the official labour force participation rate.

2. The Size of the Black Economy in Morocco

Table 2 reports the estimated coefficients of the MIMIC model using the LISREL¹⁶ statistical package for the Moroccan economy between 1975-2000. The

¹⁴ Caution should be taken here. As the economy grows, more cash will circulate, not necessarily as a result of informal activity, but simply because cash is the preferred means of exchange as only 20 percent of the Moroccan population currently uses banking services.

¹⁵ RERMIS is included in the present study to account for the potential impact of workers remittances and exceptional privatisation receipts on the real exchange rate. An overvalued real exchange rate could depress the export sector and force exporters to find alternative sources of revenues in the informal economy.

LISREL coefficient of the per capita income is positive and significant at the one percent level, implying that as individuals get richer, they have more incentives to join the informal activity. They could be doing so to avoid taxation, since the richer they get, the larger the total amount paid in the form of taxes. Similarly, assuming people spend their income in both the formal and informal sectors, an increase in their income will translate into an increase in the amount spent in the underground economy, hence the positive relationship between the level of income and the size of the black economy.

Government's expenditure share in GDP is also positive and significant with a strong coefficient, confirming the positive link between wasteful public expenditure in non-productive activities and the shadow economy. The tax revenues to GDP ratio, on the other hand, appears in the model as negative and significant, as expected. A large tax to GDP ratio implies people are actually paying their taxes, and hence are operating in the recorded sector where tax payment is enforced. Combining the effect of government expenditure and tax revenues would be equivalent to considering the impact of a budget deficit on the size of the black market. In the present case, a large budget deficit financed through borrowing instead of tax collection appears to be conducive of a larger underground economy.

Real exchange rate misalignment, on the other hand, exhibits the expected sign but is not significant. A positive RERMIS implies real exchange rate is undervalued, which should stimulate exports and reduce exporters incentive to join the informal market. Finally, inflation appears to be a trivial factor in the decision of joining the black economy. This result in itself is not surprising in light of the steady decline in the level of inflation recorded in Morocco during the period under review.

The estimation of the RERMIS is not included in the present paper but can be provided upon request.

Table 2: LISREL Maximum Likelihood Estimates of The Hidden Economy in Morocco

	PCAPGDP	Tax/GDP	INFLATION	Government expenditure/GDP	RERMIS
Coefficient	3.192	-1.029	-0.055	2.018	-0.122
Standard error	0.001	9.436	4.447	10.971	0.288
T-ratio	8.744	-5.466	-0.347	8.637	-1.025

Table 3 shows the estimated size of the shadow economy for the Moroccan economy over the period 1975-2000¹⁷. The size of the shadow economy as a ratio of recorded GDP appears to have been quite stable over the period under review, averaging 37 percent. This implies that the black market has been as volatile as and covaried with official GDP in the short run since the 1970s. In the long run, however, incentives to join the black economy have not changed dramatically, hence the constant ratio to GDP. Consequently, one effect of the reforms undertaken in Morocco may have been to prevent a worsening of the existing distortions.

VI. Concluding Remarks and Policy Implications.

This paper reviewed the Moroccan experience with financial reforms and showed that despite noticeable financial development since the early 1990s, little subsequent growth has been achieved, essentially as a result of stagnant private sector investment. Aggregate data and results from a questionnaire addressed to Moroccan bankers suggest that one of the main beneficiaries from financial liberalisation has been the public sector, which is now able to finance its deficit from domestic sources at lower cost. In addition, borrowing-financed public spending appears directly to have stimulated informal private activities that have little need for bank loans, suggesting that budget deficits have both stimulated the demand for and the supply of bank lending to the public sector. In

¹⁶ Linear Interdependent Structural Relationship

summary, in the absence of a fast and efficient legal system and flexible labour regulations, financial liberalisation does not promote higher growth. Instead, restrictions resulting from these governance failures tend to stimulate informal economic activity.

LISREL estimates suggest that the ratio of the black economy to GDP remained constant since the 1970s, averaging 37 percent of recorded GDP. This implies that market distortions that typically encourage individuals to join the informal economy have not worsened, hence the stagnant ratio to GDP. Still, one would have hoped that reforms conducted for more than a decade would have corrected some of these distortions, therefore resulting in a decline in the size of informal economic activity.

However, until recently, the Moroccan authorities have placed better governance at the far end of their priority list, putting very little effort to control the resulting increase in the size of the shadow economy, as the latter have proved to be quite helpful in absorbing a significant portion of the unemployed population. But the poor working conditions and the low salaries that typically characterise the underground economy, along with stagnant private investment, call for drastic improvements in governance. These include more flexible labour regulations and a more efficient legal system, that would in turn promote more private investment and lead to the creation of more regulated and decently paid jobs in the formal sector.

Major efforts are being made to improve the overall investment climate-new commercial courts are created, trade and labour laws have been or are being revised, regional investment centres are implanted in the major cities to cut down on the number of administrative procedures to set up a business- but strong enforcement is required if these are to improve people's confidence in the Moroccan authorities and encourage

¹⁷ LISREL yields a time series index of the hidden economy. This index is then converted to a share of

sufficient private investment to promote growth. In addition, the LISREL estimates described above suggest that the most damaging market distortion is currently the size of the budget deficit and its financing through borrowing instead of tax collection. Unless the government improves tax collection and reduces its reliance on borrowing, informal economic activity will persist. Nonetheless, tax enforcement should be accompanied by an improvement in the quality of public goods and services. Otherwise, it will probably encourage more people to operate in the black market. This will reduce further revenues from taxation and increase the government's reliance on borrowing to finance budget deficits, stimulating further the underground economy and trapping the economy in a vicious circle.

Table 3: Estimates of the Hidden Economy of Morocco, 1975-2000 (% of GDP)

Year	Size
1975	37.21372
1976	37.336
1977	37.36837
1978	37.35214
1979	37.41665
1980	37.51808
1981	37.39907
1982	37.75188
1983	37.64348
1984	37.79445
1985	37.94418
1986	37.99574
1987	37.86013
1988	37.92099
1989	37.85392
1990	37.51344
1991	37.57809
1992	37.48042
1993	37.46263
1994	37.61656
1995	37.44378
1996	37.70274
1997	37.42676
1998	37.52226
1999	37.36353
2000	37.28295

Source: Estimated with LISREL statistical software using the MIMIC methodology

References

- Achy, Lahcen (2002). *Labour market and growth in Morocco*. Global Development Network.
- Bank Al Maghrib, (1992-) Annual Report
- Bagehot, W. (1873) Lombard Street. Homewood, IL: Richard D. Irwin.
- Bhattacharyya, Dilip K. (1999). *On the Economic Rationale of Estimating the Hidden Economy*. *Economic Journal*, 109:456, pp. 348–59.
- Berrada, M.A. (1998) Les Nouveaux Marchés des Capitaux au Maroc. Edition SECEA, Casablanca, Morocco.
- Berrada, M.A. (2000) Les Techniques de Banque, de Crédit et de Commerce Extérieur au Maroc. Edition SECEA, Casablanca, Morocco.
- Cagan, Phillip (1958). *The Demand for Currency Relative to the Total Money Supply*. *Journal of Political Economy*, 66:3, pp. 302–28.
- Direction de la Statistique (2003). Enquête Nationale sur le Secteur Informel Non-Agricole 1999/2000. Morocco.
- Favara, G. (2003). *An Empirical Reassessment of the relationship between Finance and Growth*. . IMF Working Paper No. 03/123, Washington D.C., IMF.
- Goldsmith, R. (1969) Financial Structure and Development, New Haven, CT: Yale University Press.
- Heritage Foundation (2003). *Index of Economic Freedom*.
- International Monetary Fund, (1986-) International Financial Statistics.
- Joreskog, K.G. and Goldberger, A.S. (1975). *Estimation of a model with multiple indicators and multiple causes of a single latent variable*. *Journal of the American Statistical Association*, Vol.70, pp.631-639.

Kaufmann Daniel, Kaliberda Aleksander (1996). *Integrating the Unofficial Economy into the Dynamics of Post-Socialist Economies: A Framework of Analysis and Evidence*, in Economic Transition in the Newly Independent States, B. Kaminski editor, Armonk, New York: M.E. Sharpe Press.

Kaufmann, Dani, Aart Kraay, and Pablo Zoido-Lobaton. (2002). *Governance Matters II*. World Bank Policy Research Working Paper 2772. World Bank, Washington, D.C.

Khan, Mohsin S. and Senhadji, Abdelhak S. (2000). *Financial Development and Economic Growth: An overview*. IMF Working Paper No. 00/209, Washington D.C., IMF.

King, R. and Levine, R. (1993) *Finance and Growth: Schumpeter might be Right*. Quarterly Journal of Economics, Vol. 108, No. 3, pp717-737.

Levine, R. (1997). *Financial Development and Growth: Views and Agenda*, Journal of Economic Literature, Vol. 35, pp688-726

Lucas, Robert E. (1988) *On the Mechanics of Economic Development*. Journal of Monetary Economics, Vol.22, pp3-42

McKinnon, R.I.(1973) Money and Capital in Economic Development, Washington DC.

McKinnon, R.I.(1988). *Financial Liberalisation in retrospect: Interest Rate Policies in LDCs*. The State of Development Economics, Oxford: Basil Blackwell 386-415.

Patrick, High T. (1966), *Financial Development and Economic Growth in Underdeveloped Countries*, Economic Development and Cultural Change, 14, January, 174-189

- Robinson, J. (1952) The Rate of Interest, and Other Essays. London: Macmillan.
- Salisu, M.A (2000). *Corruption in Nigeria*. Lancaster University Management School Working Paper, Lancaster.
- Schneider F. (1998). *Further empirical results of the size of the shadow economy of 17 OECD-countries over time*. Paper presented at the 54th Congress of the IIPF Cordoba, Argentina and discussion paper, Department of Economics, University of Linz, Linz, Austria.
- Schneider, F., Eneste D. (2000). *Shadow Economies Around the world: Size, Causes, and Consequences*. IMF Working Paper n.26.
- Shaw, E. (1973). Financial Deepening in Economic Development. Oxford University Press, NY.
- Schumpeter, J.A. (1911) The theory of Economic Development, translated by Redvers Opie. Cambridge, MA: Harvard University Press 1934.
- Tanzi, Vito (1983). *The Underground Economy in the United States: Annual Estimates, 1930–1980*. IMF Staff Papers, 30:2, pp. 283–305.
- Trabelsi, Mohamed (2002). *Finance and Growth: Empirical Evidence from Developing Countries, 1960-1990*. Centre de Recherche et Développement Economique, Université de Montréal, Canada.
- Transparency International (2003). *Transparency International Corruption Perceptions Index*
- World Bank, 2002, World Development Indicators CD-ROM, Washington D.C
- World Bank, 2003, *Governance for Development in the Middle East and North Africa. Enhancing Inclusiveness and Accountability*. Washington D.C

Zellner, A.(1970). *Estimation of regression relationships containing unobservable variables*. International Economic Review, Vol.11, pp.441-454.