WP/17/143

IMF Working Paper

Financial Development and Source of Growth:
New Evidence

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INTERNATIONAL MONETARY FUND

 WP/17/143

IMF Working Paper

Institute for Capacity Building

Financial Development and Source of Growth: New Evidence[1]

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Authorized for distribution by Ralph Chami

June 2017

Abstract

This paper examines how financial development affects the sources of growth—productivity and investment—using a sample of 145 countries for the period 1960-2011. We employ a range of econometric approaches, focusing on the CCA and MENA countries. The analysis looks beyond financial depth to capture the access, efficiency, stability, and openness dimensions of financial development. Yet even in this broad interpretation, financial development does not appear to be a magic bullet for economic growth. We cannot confirm earlier findings of an unambiguously positive relationship between financial development, investment, and productivity. The relationship is more complex. The influence of the different dimensions of financial development on the sources of growth varies across income levels and regions.

JEL Classification Numbers: G21; O16; O40

Keywords: Financial Development, Growth, Total Factor Productivity, Capital Accumulation

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[1] The authors would like to thank Risto Herrala, Oussama Kanaan, Divya Kriti, Vina Nguyen, Farid Talishi, Natalia Tamirisa and participants at the IMF meeting on surveillance for helpful comments; Basil Awad for research assistance. Neil Hickey for editorial assistance; Rasha El-Askary and Jennifer Azar for administrative assistance. All errors and omissions are our own.

I. INTRODUCTION AND MOTIVATION

We provide new evidence that financial development is not a magic bullet for economic development. Instead, the relationship between finance, productivity, and investment is complex, and there is no unambiguously positive relationship where "finance" boosts productivity and investment everywhere and at all times. This result seems intuitive once we acknowledge that financial development has many dimensions. Consistent with Čihák et al. (2012), we distinguish between four dimensions: (i) financial depth; (ii) financial efficiency; (iii) financial stability and openness; (iv) and access to financial services. Financial stability and stock market efficiency are the only dimensions that appear related to productivity and capital accumulation across time and countries. The effect of other dimensions depends on country characteristics, such as income level and region. For example, financial openness can boost productivity in low-income countries, but the positive effect vanishes in advanced countries. Effects can also vary over time, with financial depth, for example, contributing positively to growth in the pre-2005 period.

We also examine whether financial development exerts particular effects in the CCA and MENA region. But we find only mild evidence for differential regional effects. CCA and MENA oil importing countries may stand to gain extra benefits from increasing the efficiency of their banking sector efficiency, measured by interest rate spreads and overhead costs. This results likely reflects the generally weak level of competition in these markets (see Rocha, 2011, for example), translating into high prices for borrowers and high operational costs.

Our paper complements the existing literature in three respects. First, we extend the data to include the recent global financial crisis and a large number of countries. Specifically, the sample contains unbalanced panel data for 145 countries from 1960 to 2011. We focus in particular on the CCA and MENA countries to see if financial development in these countries differs from other regions. Second, we use 16 different indicators of the four main dimensions of financial development—depth, efficiency, stability/openness and access—to capture all aspects of the financial sector. Our results about financial development are therefore more general than earlier contributions that rely merely on some financial indicator measuring countries' financial depth. Third, we focus on how financial development affects the sources of growth, productivity and capital accumulation, and not growth itself.

The relationship between financial development and economic growth on the theoretical level has always been controversial. Robinson (1952) and Lucas (1988) believe that financial intermediaries develop in response to demand from the real sector. On the other hand, Schumpeter (1912), Gurley and Shaw (1955), Goldsmith (1969), Greenwood and Jovanovich (1990), and others see finance as an important contributor to growth by improving resource allocation through the provision of ex-ante information on investment projects, promoting saving through risk diversification, and easing exchange through the reduction of transaction costs.

The early consensus of the empirical literature on the finance and growth nexus has, by and large, supported the positive relationship between development and growth using cross-country, time-series, and panel data, as well as industry- and firm-level studies (see Levine 2005 for a literature review). More recent evidence, however, points to a more complex relationship, which depends on the level of financial and economic development, as well as the quality of institutions. Applying a threshold regression model, Deidda and Fattouh (2002) argue there is no significant relationship between financial development and growth in low-income countries, whereas the relationship is positive and strongly significant in high-income countries. Rioja and Valev (2004a) add that this relationship varies according to the level of financial development, finding a positive and significant effect of financial development on growth only with medium and high levels of financial development. Rioja and Valev (2004b) find that finance affects growth through capital accumulation in low-income countries and through productivity growth in middle- and high-income countries.

Recent papers by Cechetti and Karroubi (2012) and Arcand and others (2012) have revisited the finance-growth nexus, showing that the level of financial development is good for economic growth only up to a point between 90 percent and 100 percent of GDP, turning negative for high-income countries. This result is consistent with "the vanishing effect of financial development" (Law and Singh, 2014). These studies suggest that the positive effect of finance on economic growth may be more nuanced, but they do not reject the prevailing consensus that finance is good for growth.

The global financial crisis has been a turning point. Using recent data up to 2010, Rousseau and Watchel (2011) and Beck and others (2012b) find a much lower effect of finance on growth than previous studies. In fact, Rousseau and Watchel (2011) find that the finance-growth relationship disappeared during the period between 1990 and 2004. They attribute the vanishing effect to financial crises related to rapid and excessive financial deepening. Arcand and others (2012) suggest that the vanishing relationship between finance and growth could be attributed to "the fact that many countries have reached the point at which financial deepening starts having a negative effect on growth." Beck and others (2012a) explain that the vanishing effect could also be related to the increase in the share of household loans to the detriment of company loans: they find that enterprise credit is positively associated with economic growth, whereas household credit is not. By extending the sample to include the global financial crises, though on a relatively small sample of 46 countries, Bezemer and others (2014) find a high ratio of bank credit to GDP has a negative effect on growth. They suggest that this negative relationship between finance and growth is due to a shift in the share of credit away from nonfinancial institutions.

This paper is organized as follows: section 2 describes the dataset, the empirical model, and the econometric methodology; section 3 discusses the empirical findings; and section 4 concludes with some plausible factors that might explain the vanishing effect of the finance-growth nexus.

II. DATA

This study utilizes available data on financial development and the sources of growth for a large number of countries between 1960 and 2011. Our dataset is limited only by source data availability. Accordingly, the number of observations across both country and time dimensions varies in each model. In line with prior work, we employ multi-year, non-overlapping averages of the available data when possible,[2] which isolates and removes business cycle effects, focusing on the relationship between each financial indicator and the sources of economic growth. This section describes the measures of sources of growth, financial development, and control variables.

A. Sources of growth

We add to the literature by decomposing economic growth using standard growth-accounting practices into total factor productivity (TFP) growth and capital stock accumulation, both of which are extracted from the Penn World Tables. This dataset offers a comprehensive global database with estimates for capital stock and TFP since 1950. The methodology used accounts for heterogeneity in labor income over time and constructs the capital stock based on decomposed assets (higher weights to fixed assets), allowing for accurate and comparable estimates of TFP for a wide array of countries over a long-time period.[3]

B. Financial development indicators

We examine a wide range of financial indicators to capture the four main dimensions of financial sector development—depth, efficiency, stability/openness, and access. We therefore extend the analytical approach of much of the existing literature that focuses on credit and monetary aggregates. Relying primarily on the Global Financial Development Database, which includes a wealth of financial sector indicators, we consider the effects of depth, efficiency, stability, openness, and access on the two dominant sources of growth (productivity and capital accumulation). Due to a potentially non-linear relationship between economic growth and

[2] For variables with shorter available time series, we use either three year non-overlapping averages or annual observations.

[3] http://www.rug.nl/research/ggdc/data/pwt/v80/capital_labor_and_tfp_in_pwt80.pdf for more details on the construction of the database.

(continued…)

control variables, we transform all variables into natural logarithm forms.[4] Table 1 defines each included indicator by dimension, while Figures 1 and 2 show basic relationships between the financial variables and the sources of growth

C. Control variables

To assess the strength of an independent relationship between growth and financial development, we introduce control variables as suggested by the finance-growth literature. The logarithm of initial real GDP per capita is introduced to control for economic convergence. Average years of schooling are included to control for the level of human development. We also use the trade-to-GDP ratio, the ratio of government consumption to GDP, and oil prices to control for openness and the role of the state in the economy.

D. Empirical Methodology

The basic specification used in this paper follows the general regression model used in other studies (Levine 2005) and can be summarized as:

$$g_{it} = \alpha y_{i,t-1} + \beta' F_{i,t} + \gamma' X_{i,t} + \eta_i + \lambda_t + \epsilon_{i,t} \quad (1)$$

where g_{it} represents growth in either total factor productivity or the capital stock. $y_{i,t-1}$ represents initial real GDP per capita and serves as a measure of the tendency for growth rates to converge across countries over time. The nexus of interest is the impact of $F_{i,t}$, the financial dimension, on each respective component of economic growth. $X_{i,t}$ represents the vector of macroeconomic control variables and includes initial GDP per capita, the trade to GDP ratio, average years of schooling, and the government consumption to GDP. η_i is an unobserved country-specific effect, λ_t is a time-specific effect, $\epsilon_{i,t}$ is the time-varying error term, and i and t represent country and time period, respectively.

Rewriting Eq.1 using the first difference as suggested by Arellano and Bond (1991), we obtain the following equation:

$$\Delta g_{it} = \alpha \Delta y_{i,t-1} + \beta' \Delta F_{i,t} + \Delta \gamma' X_{i,t} + \Delta \lambda_t + \Delta \epsilon_{i,t} \quad (2)$$

Although this differentiation eliminates the country specific effect, it introduces a new bias because of the correlation of the new error term with the lagged new dependent variable.

[4] All variables are transformed into logarithms except for the Chinn Ito index, which is used in its original form.

Arellano and Bond (1991) propose that the lagged levels of the dependent variables be used as instruments in the regression equation in differences.

To reintroduce the cross-section dimension of the regression and to address the issue of the persistence of the lagged dependent variables as weak instruments in the GMM difference regression, we use the system GMM proposed by Arellano and Bond (1997). The new estimates consist of the stacked regression in differences and levels where the lagged levels are used as instruments in the difference regression and the difference as instruments in the level regression.

The consistency of the system GMM is tested using the tests proposed by Arellano and Bond (1997). The first is a Hansen test of over-identifying restrictions, which tests the validity of the instruments. The second test examines whether the differenced error term is second-order serially correlated. Failure to reject both tests lends support to our estimator.

To ensure that the Arellano-Bond test detects the desirable serial correlation properties in the residuals of the differenced equation, the capital accumulation regressions contain two lags of the dependent variable. In the TFP regressions, one lag of the dependent variable is sufficient. We restrict the number of instruments to less than the number of included countries to guard against a proliferation of instruments, which can bias the GMM estimates.

We supplement the baseline specification above to investigate heterogeneity and non-linearity within the sample. Descriptions of the five included specifications follow, each of which was estimated for each financial indicator and both sources of growth:

$$g_{it} = \alpha y_{i,t-1} + \beta' F_{i,t} + \delta' F_{i,t} xINT + \gamma' X_{i,t} + \eta_i + \lambda_t + \epsilon_{i,t} \quad (3)$$

To capture non-linearities, we interact the financial variables with one of five alternatives: (1) income level; (2) inflation regime; (3) quality of institutions; (4) level of financial development; and (5) regional dummies. The dummy variables used in specifications (i-iv) were created by splitting the sample equally into three ranked subgroups. Regional subgroups include the Caucasus and Central Asia (CCA), Middle East and North Africa Oil Exporters (MENAPOE), and the Middle East and North Africa Oil Importers (MENAPOI).

III - EMPIRICAL RESULTS

We find evidence to support a nuanced view of the importance of financial development and economic growth. Our results display no unambiguously positive relationship between "finance" and the sources of growth. In some cases, excessive financial development may have detrimental effects on growth. We do find evidence, however, that the dimensions of financial stability and

efficiency are linked to growth. Nonperforming loans and stock market turnover emerge as the only two indicators of financial development to exhibit a general relationship with productivity growth and capital accumulation which is both robust and economically significant.

A. Unconditional correlations

Data plots (Figures 1 and 2) display simple scatter plots between each of the financial indicators and either TFP growth or capital accumulation. The data included for each financial dimension—access, depth, efficiency, openness, and stability—are represented in the logarithmic forms as discussed in the data section above. As shown in the panels, there is little evidence of a strong overarching relationship between any of our financial indicators and the sources of growth. This is echoed in unconditional correlation coefficients, presented in Table 3. Even when the effect is significant, it is small and fails to consider the important contributions from other relevant macroeconomic, institutional, regional, or developmental characteristics.

B. Dynamic panel regressions

Baseline regressions

Results for the productivity and capital accumulation regressions are reported in Tables 4-19. For each dependent variable (productivity growth or capital accumulation), column 1 displays the parsimonious baseline specification, while columns 2-6 include additional considerations for income differentiation (column 2), inflation regimes (column 3), institutional quality (column 4), financial depth (column 5), and regional characteristics (column 6). Consistent with other studies in the literature, measures of initial income levels, openness, government size, and human capital are included as control variables (Beck and others 2000c).

High nonperforming loans, per our results (Table 11), result in an economically sizable negative effect on productivity growth and capital accumulation. This result speaks to the importance of a healthy banking system for channeling financing to growth-enhancing investment, even in countries with developed sources of non-bank financing. A one standard-deviation decline in NPLs, corresponding to a decline in the ratio of NPLs to gross loans from 13 to 6 percent, is associated with a 1.2 and 1.5 percentage point improvement in annual TFP and investment growth, respectively. Similarly, the stock market turnover ratio has a significantly positive effect on TFP and capital accumulation, in line with theoretical and empirical work that emphasize stock market liquidity improves the efficiency of the capital allocation process and therefore facilitates long-term growth (Holmstrom and Tirole 1993; Bencivenga, Smith, and Starr 1995).

Financial depth and financial openness are two dimensions that also have significant associations with either TFP or investment in the benchmark specification. However, the significance of the

estimated coefficient seems to be due to specific country-year observations (more below), therefore making it difficult to generalize for the entire sample.

For all other dimensions of financial development, we fail to detect a general relationship with the sources of growth. Previous studies already found that deeper financial markets—banking and non-banking—do not lead to better growth outcomes (Loayza and Ranciere 2006; Rioja and Valev 2004a, 2004b; and Cecchetti and Kharroubi 2012). We analyze all other dimensions of financial development to generalize this finding: financial development is no magic bullet for generating growth.

Instead, our results support the notion that the relationship between financial development and the sources of growth are marked by thresholds and vary across country characteristics. Specifically, the effect of finance depends on a country's: (1) income level; (2) policy regime; (3) institutional quality; and (4) region. While disappointing for advocates of the unfettered good of developing financial markets, our results underscore the complexity of the channels that lead from finance to growth. The effectiveness of financial development to accelerate productivity and investment appears to depend on the specific economic circumstances of individual countries.

Income Thresholds

We next investigate whether the role of finance changes as a country becomes richer. Our estimations suggest that some of the positive effects of financial development, touted by the traditional literatures on financial development, accrue only in low-income countries (Law and Singh, 2014). Advanced economies, on the other hand, can suffer from "excessive" financial development.

To uncover the differential impact of financial development across stages of development, we create time-varying income categories. In each period, we take the bottom third of countries in the income distribution to be low-income, the countries in the middle as middle-income, and the top third as advanced. Dummy variables designate each country observation to one of the three income categories. The interaction terms between the income dummies and the financial indicator then measure the differential impact of finance at three stages of development.

Column 2 shows the results for specifications that contain these interaction terms. Low-income countries with more borrowing from foreign banks experience significantly faster TFP growth than those without integration into the international banking system. Deeper credit markets also support TFP, although the coefficient is only significant at the 10 percent level. In addition to deepening, the health of the banking sector is crucial. The detrimental effects on investment from poor asset quality of banks are more pronounced in low-income countries than elsewhere. Stock

market development, on the other hand, does not emerge as an important determinant of growth in low-income countries.

Taken together, the low-income interactions suggest that integrating the domestic banking sector into international financial markets can deliver significant benefits at the early stages of development, if countries safeguard financial stability. The regressions do not identify the channels responsible for generating the growth benefits, but previous studies (Giannetti and others 2002) suggest that financial integration facilitates access to foreign technology and markets.

Our results do not suggest that financial development has a significantly different impact in middle-income countries. The middle-income interaction term is never significant. This result stands in contrast to the inverted U-shape hypothesis of financial development (Rioja and Valev 2004b) positing that financial development matters most at intermediate stages of development.

Advanced economies, on the other hand, can experience the downside of financial development having gone too far. According to the estimates in columns 3 and 9, deeper credit markets and more foreign borrowing from international banks depresses TFP in advanced countries. Previous studies have documented that cross-border banking flows can be destabilizing if they lead to current account reversals and exchange rate volatility. These phenomena were on striking display during the global financial crisis in 2008/09. Countries with the largest and most open banking sectors also suffered the largest output losses in that crisis (UNCTAD 2010). In unreported results that exclude the most recent observation from the estimations, the negative sign on the advanced country interaction disappears and the coefficient becomes insignificant.

Inflation and Institution Thresholds

We do not find robust evidence that the effect of financial development depends on a country's policy regime or institutional soundness. Analogous to our approach in identifying income thresholds, we create three inflation and institution categories, respectively, for every period: low, medium, and high. Country observations in the bottom third of the distribution of inflation outcomes and institutional quality in each period are classified as low, the middle third as middle, and the top third as high. We interact the resulting dummy variables with the relevant financial indicator to examine the importance of policy regime and institutional quality.

The interaction terms of financial development with inflation and institution thresholds (Tables 4-19) are not significant, with two exceptions. First, the premium on safeguarding financial stability is larger in environments characterized by low inflation and high institutional quality. This result strikes an intuitive chord. In countries with high inflation and bad institutions, the marginal impact on productivity and investment from financial instability will be less given that

the non-conducive environment already saps the sources of growth. Second, macroeconomic stability and resilient institutions can bring out the beneficial effects from financial development. Financial integration under strong institutions and larger stock markets in low-inflation environments lead to faster investment growth. This result is particularly important for advanced countries to guard against the unwanted consequences of "excessive" financial development.

Regions

Finally, column 6 shows specifications that focus on three country groups—the Caucasus and Central Asia (CCA), as well as the oil exporters and importers in the Middle East and North Africa—to examine if financial development in these countries leads to systematically different outcomes than in other countries. The estimates suggest that all three country groups in fact exhibit some mild differences from the rest of the world.

The CCA countries seem to see economically large benefits from increasing the efficiency in their banking sectors. Regulatory barriers have protected incumbent banks in these regions, reducing pressures to increase efficiency in banking operations and credit allocation decisions.

For MENA oil exporters, the only financial dimension that appear significant in the regressions is efficiency measured by bank overhead costs to total assets. Puzzlingly, however, the dummy carries the wrong sign, suggesting that greater financial efficiency is associated with detrimental effects on productivity. Equally counterintuitive, oil-importing countries in the MENA region seem to suffer weaker productivity in response to tighter net interest margins and greater financial stability, measured by bank Z score and loan to deposit ratios. To make sense of these puzzling results, we underscore the notion that financial development can help support growth only if institutional prerequisites are in place. MENA oil importers and exporters, however, with a financial system dominated by banks, have weak creditor rights and supervisory regimes (Rocha et al, 2011). The case of MENA countries illustrates that increasing financial activity in environments without adequate infrastructure is more likely to undermine growth prospects than boost them.

IV - CONCLUSION

We fail to establish positive relationships between most financial development indicators, investment, and TFP growth. Most of the various dimensions of financial development are effective in bolstering the sources of growth depending on a country's characteristics. The one indicator that jumps out in importance for economic growth is financial stability, particularly in the banking sector. This result implies for countries seeking to accelerate their financial development, the first and foremost attention must be on reducing risks to financial stability. A country's risk of suffering a financial crisis increases as a function of the size of their financial

sector (Schularick and Taylor 2012). Rousseau and Wachtel (2011) show that the rising incidence of financial crises since 1990 is the single most important factor for explaining the vanishing growth effects of financial development.

Stability considerations aside, too rapid financial development may also engender other types of economic costs. Financial development can give rise to externalities that undermine economic growth, especially regarding the allocation of scare resources. Skilled workers in the sense that entrepreneurs working in finance are not available to engage in research and development with higher productivity effects (Cecchetti and Kharroubi 2012). Similarly, financial sectors focusing on enabling the transfer of assets (real estate mortgages) instead of the purchase of goods and services may contribute to destabilizing asset price bubbles. The positive impact on real economic activity of asset transfers may be small or altogether zero (Bezemer and others 2014).

Instead, we support the nonlinearities in the finance-sources of growth relationship identified by some earlier studies: that the effectiveness of financial development as a means of generating growth varies across income levels and regions. For low- and middle-income countries, deeper financial markets tend to reduce productivity growth and investment which may be linked to the uncompetitive markets in these countries. Productivity growth in low-income countries seems to benefit from more open financial markets. In middle-income countries, better financial access is associated with higher growth on investment.

The results also suggest that financial development in the CCA countries, as well as the MENA oil exporters and importers, has slightly different effects than in the rest of the world. Indicators of financial stability and efficiency carry an unexpected sign for these regions, highlighting the need for a sound institutional framework based on effective creditor rights and banking supervision. We see some evidence that CCA and MENA oil importing countries stand to gain from increasing efficiency and competition in their banking sectors.

Our paper reinforces what policymakers across the world already know: financial development needs to proceed according to country-specific circumstances, and safeguarding financial stability is a pre-requisite to avoid entering the territory where financial development starts undermining, instead of fostering, growth.

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Table 1: Data Description

Variable	Description
Dependent Variables:	
Total Factor Productivity Growth	Percent change in total factor productivity at constant national prices (2005=1). Source: Penn World Tables.
Capital Accumulation	Percent change in capital stock at constant 2005 national prices (millions of 2005 U.S. dollars). Source: Penn World Tables.
Control Variables:	
Initial GDP per Capita	Lagged GDP per capita at constant 2005 national prices (millions of 2005 U.S. dollars). Source: Penn World Tables.
Government Consumption	Government consumption in percent of GDP. Source: IMF World Economic Outlook.
Trade to GDP	Imports (of goods and services) in percent of GDP plus exports (of goods and services) in percent of GDP. Source: IMF World Economic Outlook.
Human Capital	Average years of secondary schooling. Source: Barro, Robert and Jong-Wha Lee, April 2010, "A New Data Set of Educational Attainment in the World, 1950-2010." Journal of Development Economics, vol 104, pp. 184-198.
Financial Variables:	
Depth:	
Private Credit	Private credit by deposit money banks and other financial institutions in percent of GDP. Source: Global Financial Development Database.
Liquid Liabilities	Liquid liabilities (broad money) in percent of GDP. Source: Global Financial Development Database.
Stock Market Capitalization	Total value of all listed shares in a stock market in percent of GDP. Source: Global Financial Development Database.
Efficiency:	
Interest Rate Spread	Difference between lending rate and deposit rate. Lending rate is the rate charged by banks on loans to the private sector and deposit interest rate is the rate offered by commercial banks on three-month deposits. Source: Global Financial Development Database.
Stock Market Turnover	Total value of shares traded during the period divided by the average market capitalization for the period. Source: Global Financial Development Database.

Table 1: Data Description, continued

Variable	Description
Net Interest Margin	Accounting value of bank's net interest revenue as a share of its average interest-bearing (total earning) assets. Source: Global Financial Development Database.
Overhead Costs	Operating expense of a bank as a share of the value of all assets held. Source: Global Financial Development Database.
Stability:	
Non-Performing Loans	Ratio of defaulting loans (payments of interest and principal past due by 90 days or more) to total gross loans (total value of loan portfolio). Source: Global Financial Development Database.
Stock Price Volatility	Stock price volatility is the average 360-day volatility of the national stock market index. Source: Global Financial Development Database.
Bank Z-Score	Captures the probability of default of a country's commercial banking system by comparing the buffers of a country's commercial banking system (capitalization and returns) with the volatility of those returns. Source: Global Financial Development Database.
Loan-to-Deposit Ratio	The financial resources provided to the private sector by domestic money banks as a share of total deposits. Source: Global Financial Development Database.
Capital Adequacy Ratio	Ratio of total regulatory capital to assets held, weighted according to risk of those assets. Source: Global Financial Development Database.
Openness:	
Foreign Claims to GDP	The ratio of consolidated cross-border foreign claims to GDP of the banks that are reporting to BIS. Source: Global Financial Development Database.
Chinn Ito Index	Database of de jure capital controls based on information supplied by national authorities to the IMF's AREAER. Source: Chinn, Menzie D. and Hiro Ito (2006), Updated August 2014.
Assets and Liabilities to GDP	Sum of total assets and liabilities to GDP. Source: Enternal wealth of nations database.
Access:	
Bank Branches	Number of commercial bank branches per 100,000 adults. Source: Global Financial Development Database.

Figure 1.1 – Productivity Growth and Financial Sector Indicators
Five Year Non-Overlapping Averages

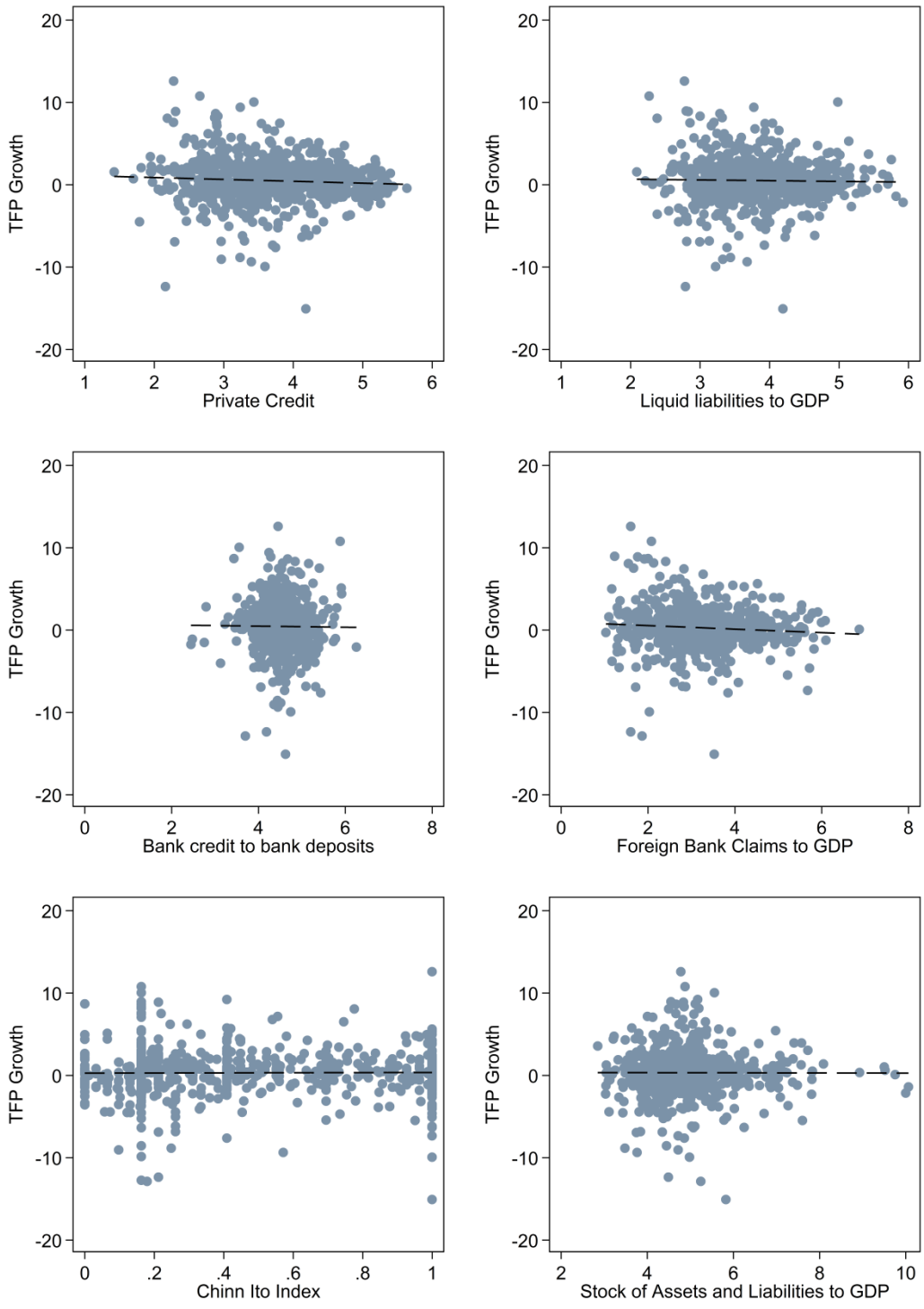


Figure 1.2 – Productivity Growth and Financial Sector Indicators

Three Year Non-Overlapping Averages

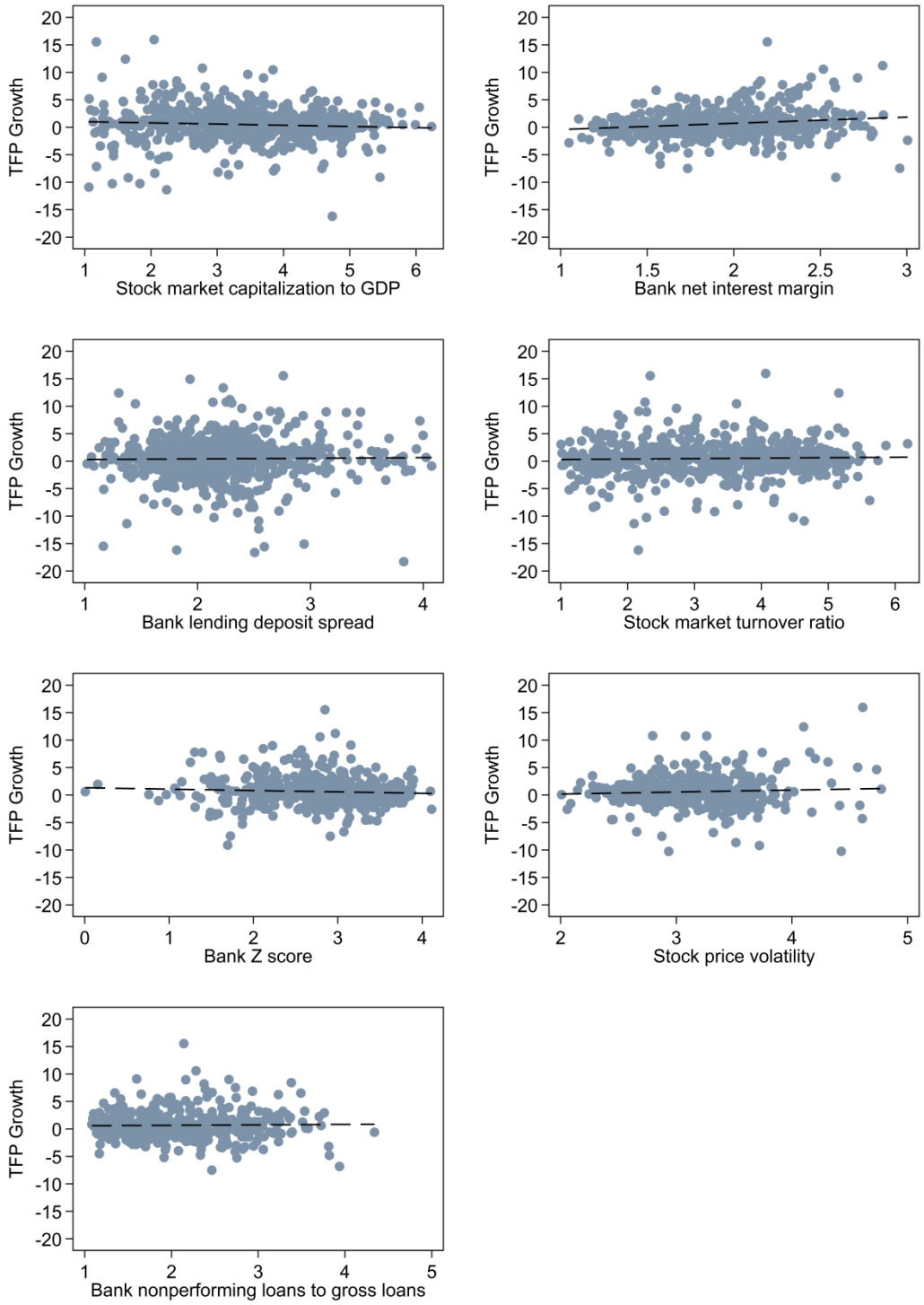
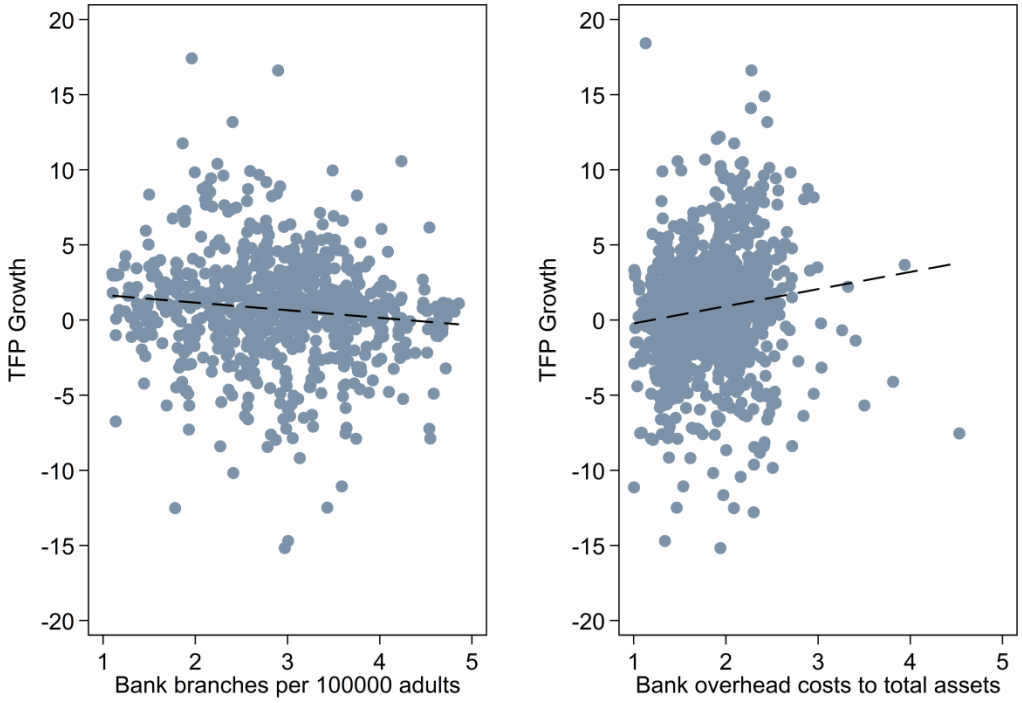


Figure 1.3 – Productivity Growth and Financial Sector Indicators
Annual Observations



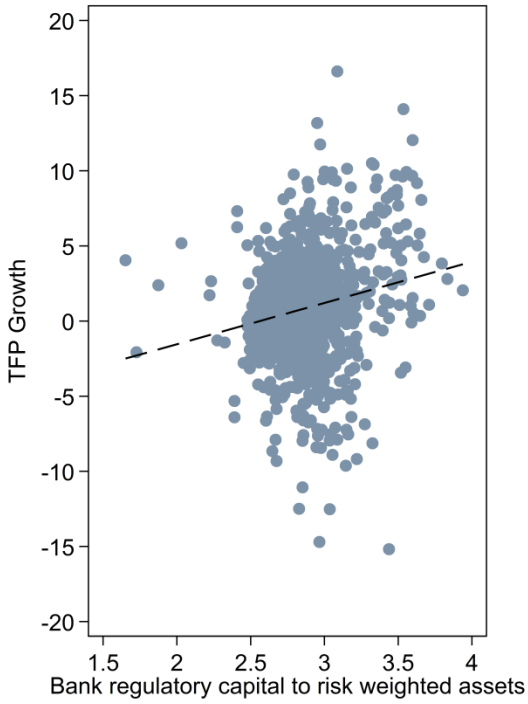


Figure 2.1 Capital Stock Growth and Financial Sector Indicators

Five Year Non-Overlapping Averages

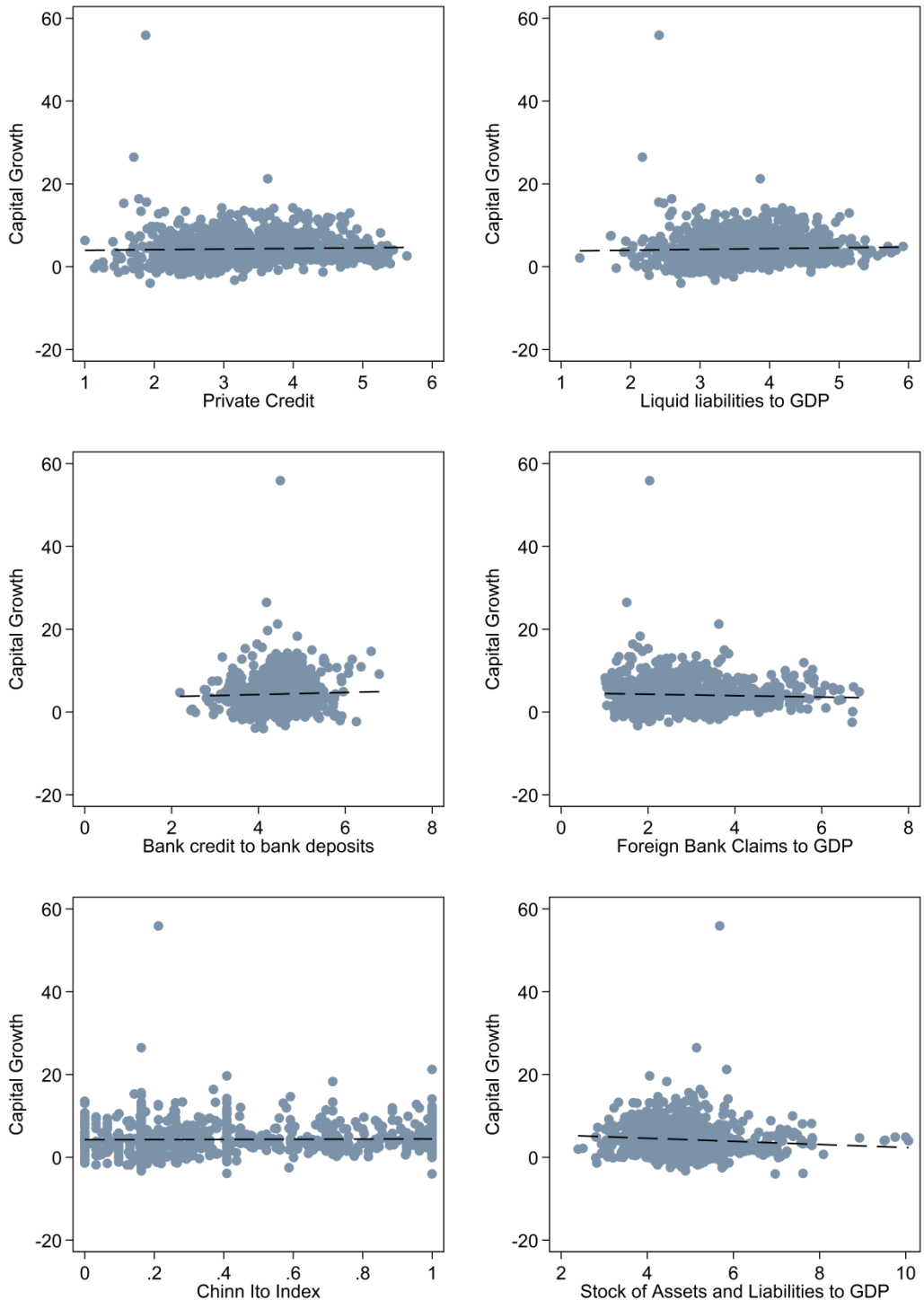


Figure 2.2 Capital Stock Growth and Financial Sector Indicators

Three Year Non-Overlapping Averages

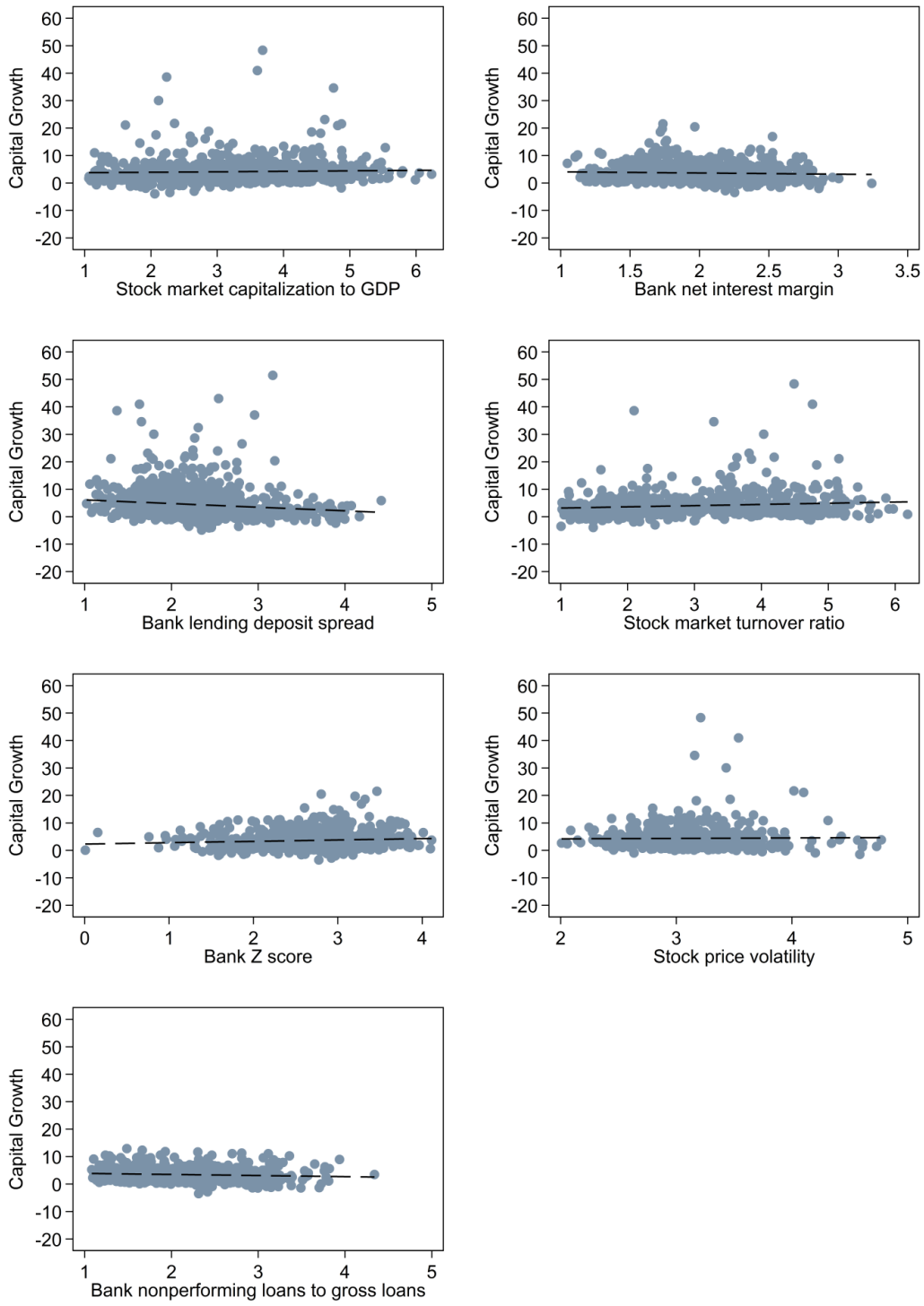
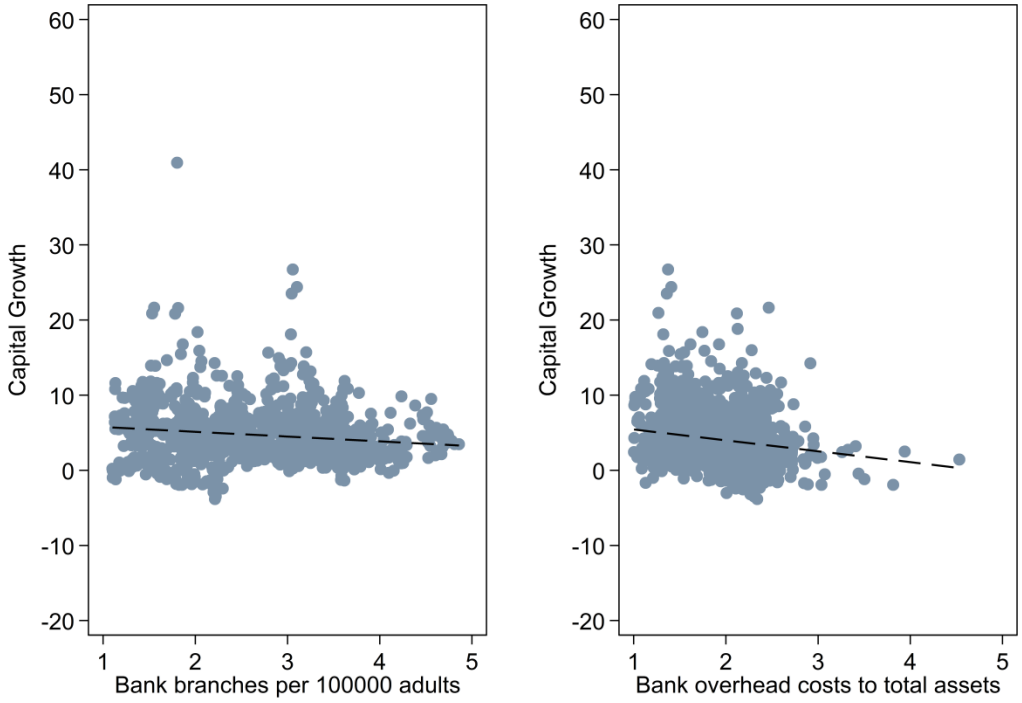


Figure 2.3 Capital Stock Growth and Financial Sector Indicators
Annual Observations



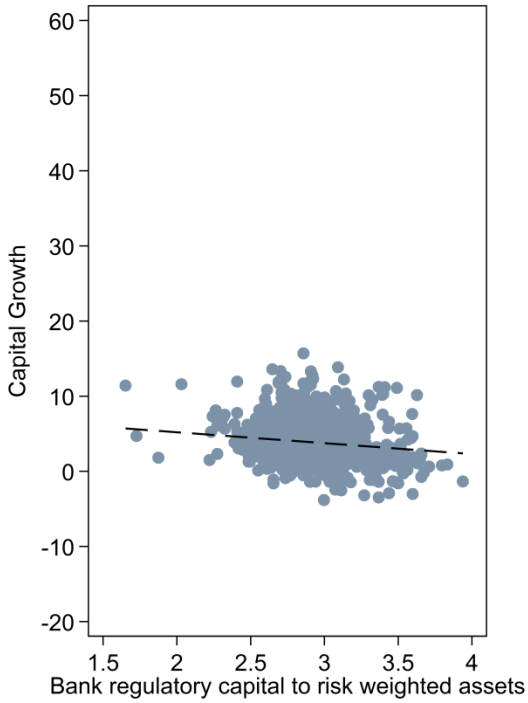


Table 2: Summary Statistics of Raw Financial Variables

	Count	Mean	Standard Deviation	Minimum	Maximum
Private Credit	5803	38.7	37.7	0.0	284.6
Liquid Liabilities	5809	47.0	38.3	0.3	399.1
Stock Market Capitalization	1972	48.1	57.2	0.0	569.5
Interest Rate Spread	3756	8.0	7.6	0.0	91.8
Stock Market Turnover	1935	46.0	59.4	0.0	538.2
Net Interest Margin	2156	5.0	3.3	0.0	39.2
Bank Overhead Costs	2167	4.1	3.7	0.0	90.3
Bank Non-Performing Loans	1267	7.4	7.9	0.1	74.1
Stock Price Volatility	1408	23.1	14.2	2.4	141.6
Bank Z-Score	2143	14.9	10.0	-21.2	65.3
Loan-to-Deposit Ratio	7250	98.6	60.0	1.1	898.1
Capital Adequacy Ratio	1276	15.8	5.2	2.5	48.6
Foreign Claims to GDP	4425	36.2	76.0	0.0	957.1
Chinn Ito Index	6137	0.4	0.4	0.0	1.0
Assets and Liabilities to GDP	6337	238.5	1079.0	5.3	24074.9
Bank Branches	1268	18.7	19.6	0.3	126.1

Note: Summary statistics are of untransformed annual observations.

Table 3: Unconditional Correlations

	Productivity Growth	Capital Stock Growth
Five Year Averages:		
Private Credit	-0.071*	0.037
Liquid Liabilities	-0.022	0.040
Loan-to-Deposit Ratio	-0.011	0.036
Foreign Claims to GDP	-0.083*	-0.052
Chinn Ito Index	0.011	0.017
Assets and Liabilities to GDP	-0.003	-0.095***
Three Year Averages:		
Stock Market Capitalization	-0.076*	0.041
Interest Rate Spread	0.023	-0.119***
Stock Market Turnover	0.034	0.120***
Net Interest Margin	0.171***	-0.053
Non-Performing Loans	0.021	-0.103*
Stock Price Volatility	0.061	0.016
Bank Z-Score	-0.063	0.097**
Annual Observations:		
Bank Overhead Costs	0.124***	-0.180***
Capital Adequacy Ratio	0.222***	-0.142***
Bank Branches	-0.118***	-0.148***

Note: Financial variables are included in log forms.
* denotes p<0.05, ** denotes p<0.01, and *** denotes p<0.001

Table 4: Private Credit

	TFP						Capital					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
Private Credit	-0.999**	-0.995**	-1.136**	-0.998	-1.205*	-0.659	-0.756	-0.146	-0.769	-1.356*	-1.207	-0.871
	(-1.98)	(-2.15)	(-2.06)	(-1.56)	(-1.76)	(-1.01)	(-1.19)	(-0.18)	(-1.19)	(-1.94)	(-1.46)	(-1.14)
Initial GDP per Capita	-0.502	0.342	-0.648	-1.467	-0.459	-0.930	0.509	-0.783	0.352	0.329	0.373	0.574
	(-0.82)	(0.39)	(-0.85)	(-1.63)	(-0.76)	(-1.10)	(0.65)	(-0.75)	(0.43)	(0.29)	(0.47)	(0.70)
Trade to GDP	0.457	1.329	1.007	-0.275	0.616	-0.464	2.575***	2.322**	2.327***	2.177**	2.843***	2.881***
	(0.63)	(1.43)	(1.43)	(-0.21)	(0.94)	(-0.41)	(2.99)	(2.53)	(2.73)	(2.01)	(3.51)	(2.62)
Government Consumption to GDP	0.336	-0.276	-0.066	1.065	0.444	-0.431	-2.337***	-2.298***	-2.710***	-2.524***	-2.336***	-2.590***
	(0.60)	(-0.43)	(-0.10)	(0.98)	(0.82)	(-0.65)	(-4.10)	(-3.94)	(-4.21)	(-2.98)	(-3.99)	(-3.71)
Years of Schooling	2.148*	3.312**	2.639**	3.597*	1.620	2.841*	-0.583	-0.212	0.153	1.454	-0.830	-0.606
	(1.73)	(2.04)	(1.99)	(1.68)	(1.53)	(1.82)	(-0.40)	(-0.15)	(0.11)	(0.76)	(-0.59)	(-0.36)
Lag 1 of TFP Growth	0.110*	0.098	0.078	0.079	0.102*	0.032						
	(1.95)	(1.56)	(1.40)	(1.30)	(1.70)	(0.47)						
Lag 1 of Capital Stock Growth							0.663***	0.617***	0.647***	0.746***	0.637***	0.582***
							(7.20)	(6.44)	(7.38)	(8.63)	(8.14)	(5.22)
Lag 2 of Capital Stock Growth							-0.097*	-0.074	-0.054	-0.089	-0.082	-0.089
							(-1.71)	(-1.21)	(-1.00)	(-1.54)	(-1.38)	(-1.58)
Private Credit*Low Income Dummy		1.368*						-0.781				
		(1.78)						(-1.33)				
Private Credit*Middle Income Dummy		0.220						-0.202				
		(0.99)						(-0.70)				
Private Credit*High Inflation Dummy			-0.192						-0.320			
			(-0.57)						(-1.15)			
Private Credit*Middle Inflation Dummy			-0.094						-0.105			
			(-0.44)						(-0.62)			
Private Credit*Low Institutional Quality Dummy				-0.248						-0.342		
				(-0.92)						(-0.83)		
Private Credit*Medium Institutional Quality Dummy				0.000						-0.170		
				(0.00)						(-0.71)		
Private Credit*Low Financial Depth					-0.322						-0.673	
					(-0.61)						(-1.53)	
Private Credit*Medium Financial Depth					-0.106						-0.110	
					(-0.58)						(-0.48)	
Private Credit*CCA Dummy						0.679						0.021
						(0.44)						(0.06)
Private Credit*MENAPOI Dummy						-0.412						-0.097
						(-1.63)						(-0.10)
Private Credit*MENAPOX Dummy						-0.598						-0.167
						(-0.84)						(-0.36)
Observations	724	724	705	547	724	724	824	824	803	625	824	824
Number of clusters	109.000	109.000	109.000	97.000	109.000	109.000	129.000	129.000	129.000	113.000	129.000	129.000
Number of instruments	73.000	93.000	93.000	82.000	93.000	62.000	73.000	93.000	93.000	83.000	93.000	63.000
Hansen test p-value	0.181	0.487	0.203	0.302	0.484	0.127	0.042	0.053	0.114	0.060	0.224	0.025
A-B AR(1) test p-value	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
A-B AR(2) test p-value	0.379	0.391	0.372	0.867	0.458	0.730	0.921	0.757	0.478	0.428	0.999	0.759
Lowest number of observations included	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Highest number of observations included	10.000	10.000	10.000	7.000	10.000	10.000	9.000	9.000	9.000	7.000	9.000	9.000
Average number of observations included	6.642	6.642	6.468	5.639	6.642	6.642	6.388	6.388	6.225	5.531	6.388	6.388

Dummy variables for time periods were also included in each model. Results for these are not reported here.
t-statistics in parentheses based on cluster-robust standard errors
* p<0.1 ** p<0.05 *** p<0.01

Table 5: Liquid Liabilities

	TFP						Capital					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
Liquid Liabilities	-0.194	-0.470	-0.513	-0.061	0.065	0.039	-0.903	-0.374	-1.117	-1.542	-1.025	-1.117
	(-0.30)	(-0.73)	(-0.75)	(-0.09)	(0.10)	(0.05)	(-0.87)	(-0.37)	(-1.25)	(-1.36)	(-0.97)	(-1.20)
Initial GDP per Capita	-1.142*	-0.367	-0.940	-1.947*	-1.146**	-1.648*	0.081	-0.588	-0.162	-0.455	-0.000	0.218
	(-1.98)	(-0.44)	(-1.59)	(-1.92)	(-2.21)	(-1.79)	(0.10)	(-0.70)	(-0.20)	(-0.40)	(-0.00)	(0.28)
Trade to GDP	0.396	1.270	0.852	0.339	0.614	-0.267	2.466***	2.264***	2.050**	2.187*	2.872***	2.533**
	(0.56)	(1.43)	(1.20)	(0.25)	(0.81)	(-0.20)	(2.91)	(2.78)	(2.57)	(1.93)	(3.74)	(2.37)
Government Consumption to GDP	0.657	-0.022	0.124	0.452	0.693	-0.018	-2.115***	-1.964***	-2.505***	-2.463***	-2.211***	-2.287***
	(1.17)	(-0.04)	(0.20)	(0.46)	(1.36)	(-0.03)	(-3.30)	(-3.16)	(-3.39)	(-2.94)	(-3.81)	(-3.51)
Years of Schooling	2.400*	3.448**	2.344*	3.189	1.813*	3.091*	0.533	0.481	1.537	3.210	0.340	0.347
	(1.89)	(2.31)	(1.70)	(1.40)	(1.69)	(1.67)	(0.35)	(0.32)	(0.97)	(1.55)	(0.27)	(0.19)
Lag 1 of TFP Growth	0.092	0.075	0.078	0.042	0.104*	-0.019						
	(1.62)	(1.34)	(1.33)	(0.67)	(1.84)	(-0.30)						
Lag 1 of Capital Stock Growth							0.650***	0.620***	0.609***	0.715***	0.621***	0.609***
							(7.27)	(7.31)	(7.40)	(7.54)	(8.03)	(5.74)
Lag 2 of Capital Stock Growth							-0.085	-0.081	-0.042	-0.088	-0.085	-0.092
							(-1.45)	(-1.41)	(-0.74)	(-1.48)	(-1.49)	(-1.49)
Liquid Liabilities*Low Income Dummy		0.942*						-0.303				
		(1.71)						(-0.71)				
Liquid Liabilities*Middle Income Dummy		0.108						0.029				
		(0.48)						(0.12)				
Liquid Liabilities*High Inflation Dummy			-0.047						-0.348			
			(-0.13)						(-1.34)			
Liquid Liabilities*Middle Inflation Dummy			-0.018						-0.148			
			(-0.08)						(-0.92)			
Liquid Liabilities*Low Institutional Quality Dummy				0.081						-0.349		
				(0.27)						(-1.05)		
Liquid Liabilities*Medium Institutional Quality Dummy				0.181						-0.162		
				(0.74)						(-0.61)		
Liquid Liabilities*Low Financial Depth					0.173						-0.279	
					(0.52)						(-0.92)	
Liquid Liabilities*Medium Financial Depth					0.031						0.017	
					(0.18)						(0.09)	
Liquid Liabilities*CCA Dummy						0.476						-0.375
						(0.86)						(-0.73)
Liquid Liabilities*MENAPOI Dummy						-1.375						0.028
						(-1.10)						(0.04)
Liquid Liabilities*MENAPOX Dummy						-0.840						0.048
						(-1.10)						(0.13)
Observations	729	729	710	548	717	729	827	827	806	627	817	827
Number of clusters	108.000	108.000	108.000	96.000	108.000	108.000	128.000	128.000	128.000	112.000	128.000	128.000
Number of instruments	73.000	93.000	93.000	82.000	93.000	62.000	73.000	93.000	93.000	83.000	93.000	64.000
Hansen test p-value	0.111	0.346	0.158	0.224	0.410	0.122	0.018	0.056	0.080	0.041	0.223	0.011
A-B AR(1) test p-value	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
A-B AR(2) test p-value	0.433	0.412	0.377	0.954	0.376	0.848	0.749	0.639	0.508	0.374	0.916	0.787
Lowest number of observations included	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Highest number of observations included	10.000	10.000	10.000	7.000	10.000	10.000	9.000	9.000	9.000	7.000	9.000	9.000
Average number of observations included	6.750	6.750	6.574	5.708	6.639	6.750	6.461	6.461	6.297	5.598	6.383	6.461

Dummy variables for time periods were also included in each model. Results for these are not reported here.
t-statistics in parentheses based on cluster-robust standard errors
* p<0.1 ** p<0.05 *** p<0.01

Table 6: Stock Market Capitalization

	TFP						Capital					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
Stock Market Capitalization	0.454	1.341**	0.823	0.090	0.228	0.165	0.761	1.352**	0.528	1.009	0.860	0.710
	(0.53)	(1.99)	(1.17)	(0.16)	(0.35)	(0.24)	(1.53)	(2.31)	(0.78)	(1.55)	(1.59)	(0.97)
Initial GDP per Capita	-2.549	-4.143**	-3.516**	-2.052	-1.087	-2.471*	-0.682	-1.928	-1.307	-2.829	-2.241*	-0.364
	(-1.53)	(-2.21)	(-2.08)	(-1.45)	(-0.96)	(-1.75)	(-0.68)	(-1.23)	(-0.92)	(-1.52)	(-1.66)	(-0.33)
Trade to GDP	4.180	4.995***	2.865	3.324*	5.427**	4.009*	3.835*	3.861**	0.646	1.512	4.533***	4.606**
	(1.63)	(2.83)	(1.29)	(1.93)	(2.62)	(1.81)	(1.97)	(2.55)	(0.27)	(0.85)	(3.11)	(2.04)
Government Consumption to GDP	2.086	3.824	-0.516	-0.136	0.520	0.240	-6.044***	-5.365***	-7.562***	-8.008***	-6.495***	-6.681**
	(0.49)	(1.00)	(-0.13)	(-0.05)	(0.15)	(0.09)	(-3.04)	(-3.18)	(-2.93)	(-2.80)	(-4.13)	(-2.33)
Years of Schooling	2.408	2.888	6.752*	4.819	0.195	3.087	1.860	1.454	7.715**	8.950**	1.603	1.342
	(0.69)	(1.13)	(1.96)	(1.26)	(0.07)	(0.88)	(0.56)	(0.50)	(2.15)	(2.13)	(0.51)	(0.35)
Lag 1 of TFP Growth	-0.046	-0.032	-0.035	-0.049	-0.014	-0.048						
	(-0.72)	(-0.46)	(-0.64)	(-0.77)	(-0.24)	(-0.83)						
Lag 1 of Capital Stock Growth							0.387***	0.385***	0.381***	0.391***	0.375***	0.413***
							(7.51)	(8.19)	(6.31)	(5.72)	(6.53)	(10.01)
Lag 2 of Capital Stock Growth							0.003	0.009	0.040	-0.008	-0.007	0.023
							(0.05)	(0.15)	(0.78)	(-0.12)	(-0.13)	(0.38)
Stock Market Capitalization*Low Income Dummy		-0.823						-1.426				
		(-0.69)						(-1.43)				
Stock Market Capitalization*Middle Income Dummy		-0.552						-0.334				
		(-1.25)						(-0.81)				
Stock Market Capitalization*High Inflation Dummy			-0.613						-0.536			
			(-1.19)						(-1.06)			
Stock Market Capitalization*Middle Inflation Dummy			-0.458						-0.241			
			(-1.25)						(-1.05)			
Stock Market Capitalization*Low Institutional Quality Dummy				0.829*						-0.298		
				(1.67)						(-0.57)		
Stock Market Capitalization*Medium Institutional Quality Dummy				0.131						-0.115		
				(0.49)						(-0.34)		
Stock Market Capitalization*Low Financial Depth					0.643						-1.028	
					(1.22)						(-1.53)	
Stock Market Capitalization*Medium Financial Depth					0.760***						-0.209	
					(2.81)						(-0.48)	
Stock Market Capitalization*CCA Dummy						-1.619						-0.050
						(-0.90)						(-0.06)
Stock Market Capitalization*MENAPOI Dummy						-0.300						-0.204
						(-0.17)						(-0.40)
Stock Market Capitalization*MENAPOX Dummy						-0.339						0.221
						(-0.41)						(0.20)
Observations	589	589	574	558	585	589	617	617	603	580	614	617
Number of clusters	92.000	92.000	92.000	87.000	92.000	92.000	100.000	100.000	100.000	94.000	100.000	100.000
Number of instruments	44.000	56.000	56.000	56.000	56.000	60.000	47.000	59.000	59.000	59.000	59.000	63.000
Hansen test p-value	0.154	0.291	0.225	0.269	0.346	0.569	0.660	0.651	0.711	0.580	0.854	0.419
A-B AR(1) test p-value	0.003	0.003	0.002	0.003	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.001
A-B AR(2) test p-value	0.252	0.410	0.038	0.217	0.207	0.213	0.265	0.271	0.359	0.174	0.262	0.349
Lowest number of observations included	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Highest number of observations included	8.000	8.000	8.000	8.000	8.000	8.000	8.000	8.000	8.000	8.000	8.000	8.000
Average number of observations included	6.402	6.402	6.239	6.414	6.359	6.402	6.170	6.170	6.030	6.170	6.140	6.170

Dummy variables for time periods were also included in each model. Results for these are not reported here.
t-statistics in parentheses based on cluster-robust standard errors
* p<0.1 ** p<0.05 *** p<0.01

Table 7: Interest Rate Spread

	TFP						Capital					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
Interest Rate Spread	-3.725**	-1.794	-2.230	-1.962	-2.730*	-4.974***	-2.847	-2.069	-2.196	-4.616**	-2.337	-0.643
	(-2.45)	(-1.36)	(-0.98)	(-1.07)	(-1.92)	(-2.92)	(-1.43)	(-1.18)	(-0.95)	(-2.00)	(-1.42)	(-0.33)
Initial GDP per Capita	-4.467***	-5.077***	-4.747***	-3.592*	-3.130***	-4.270***	-1.937	-1.852	-2.025	-3.932	-0.797	-1.360
	(-3.36)	(-4.56)	(-3.16)	(-1.86)	(-2.96)	(-2.63)	(-0.93)	(-1.13)	(-1.20)	(-1.20)	(-0.53)	(-0.74)
Trade to GDP	1.073	1.012	-0.129	3.680	0.306	0.227	6.224**	6.426***	6.520***	0.545	6.097**	6.281***
	(0.49)	(0.54)	(-0.03)	(1.50)	(0.10)	(0.11)	(2.47)	(2.63)	(2.66)	(0.20)	(2.50)	(2.96)
Government Consumption to GDP	-2.614	0.510	-1.190	-2.664	-2.403	-2.254	-2.613	-2.611	-2.346	-5.774**	-3.440**	-3.522**
	(-0.97)	(0.20)	(-0.45)	(-0.60)	(-1.13)	(-0.64)	(-1.30)	(-1.62)	(-1.28)	(-2.59)	(-2.13)	(-2.15)
Years of Schooling	10.214***	7.325***	10.179***	11.676**	6.876***	13.957***	2.351	-0.141	1.564	7.427	2.227	1.736
	(2.69)	(2.71)	(2.64)	(2.45)	(2.87)	(3.31)	(0.45)	(-0.04)	(0.35)	(1.22)	(0.77)	(0.44)
Lag 1 of TFP Growth	-0.021	-0.049	-0.021	-0.045	-0.004	-0.024						
	(-0.41)	(-0.93)	(-0.33)	(-0.69)	(-0.07)	(-0.55)						
Lag 1 of Capital Stock Growth							0.348***	0.387***	0.321***	0.245**	0.341***	0.375***
							(3.17)	(4.01)	(2.98)	(2.30)	(3.96)	(3.91)
Lag 2 of Capital Stock Growth							0.029	0.038	0.065	-0.029	0.030	0.037
							(0.66)	(0.97)	(1.25)	(-0.54)	(0.73)	(0.89)
Interest Rate Spread*Low Income Dummy		-1.675						-1.181				
		(-1.36)						(-0.81)				
Interest Rate Spread*Middle Income Dummy		-1.090						-0.286				
		(-1.19)						(-0.36)				
Interest Rate Spread*High Inflation Dummy			-0.833						-0.479			
			(-0.88)						(-0.63)			
Interest Rate Spread*Middle Inflation Dummy			-0.986						-0.206			
			(-0.83)						(-0.36)			
Interest Rate Spread*Low Institutional Quality Dummy				0.998						-1.671		
				(0.92)						(-1.55)		
Interest Rate Spread*Medium Institutional Quality Dummy				-0.109						-0.379		
				(-0.13)						(-0.51)		
Interest Rate Spread*Low Financial Depth					-0.218						0.042	
					(-0.35)						(0.07)	
Interest Rate Spread*Medium Financial Depth					0.285						0.277	
					(0.83)						(0.47)	
Interest Rate Spread*CCA Dummy						-0.213						-3.817*
						(-0.07)						(-1.67)
Interest Rate Spread*MENAPOI Dummy						2.582*						-1.072
						(1.68)						(-0.99)
Interest Rate Spread*MENAPOX Dummy						13.590						-5.370
						(1.21)						(-0.69)
Observations	773	773	747	611	715	773	911	911	880	689	831	911
Number of clusters	102.000	102.000	102.000	90.000	102.000	102.000	120.000	120.000	120.000	105.000	120.000	120.000
Number of instruments	53.000	67.000	67.000	65.000	67.000	72.000	56.000	70.000	70.000	68.000	70.000	75.000
Hansen test p-value	0.694	0.432	0.437	0.150	0.436	0.852	0.040	0.080	0.168	0.153	0.408	0.089
A-B AR(1) test p-value	0.018	0.028	0.027	0.050	0.039	0.013	0.003	0.001	0.006	0.014	0.001	0.002
A-B AR(2) test p-value	0.308	0.489	0.340	0.445	0.564	0.250	0.279	0.336	0.401	0.954	0.310	0.283
Lowest number of observations included	2.000	2.000	1.000	2.000	1.000	2.000	2.000	2.000	2.000	2.000	1.000	2.000
Highest number of observations included	11.000	11.000	11.000	9.000	11.000	11.000	11.000	11.000	11.000	9.000	11.000	11.000
Average number of observations included	7.578	7.578	7.324	6.789	7.010	7.578	7.592	7.592	7.333	6.562	6.925	7.592

Dummy variables for time periods were also included in each model. Results for these are not reported here.
t-statistics in parentheses based on cluster-robust standard errors
* p<0.1 ** p<0.05 *** p<0.01

Table 8: Stock Market Turnover

	TFP						Capital					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
Stock Market Turnover	0.927**	0.975**	0.850**	0.849*	0.779	0.676	0.707**	1.101**	0.824***	0.900*	1.165**	0.856**
	(2.05)	(2.11)	(2.40)	(1.74)	(1.59)	(1.60)	(2.16)	(2.32)	(2.75)	(1.84)	(2.54)	(2.24)
Initial GDP per Capita	-2.809**	-3.371**	-2.823**	-2.431*	-1.926	-3.094**	-0.594	-1.054	-0.412	-1.869	-1.597	-0.838
	(-2.22)	(-2.25)	(-2.44)	(-1.85)	(-1.42)	(-2.26)	(-0.49)	(-0.69)	(-0.45)	(-1.49)	(-1.26)	(-0.84)
Trade to GDP	3.424**	3.977**	2.392	2.046	3.456**	2.770*	0.875	3.079	0.015	1.528	3.278*	1.929
	(2.02)	(2.03)	(1.58)	(1.27)	(2.33)	(1.73)	(0.44)	(1.32)	(0.01)	(0.94)	(1.85)	(0.85)
Government Consumption to GDP	1.827	2.455	-1.054	-2.193	-0.609	-0.473	-8.250***	-6.631**	-8.143***	-8.492***	-7.012***	-6.152*
	(0.55)	(0.79)	(-0.32)	(-0.68)	(-0.21)	(-0.17)	(-3.54)	(-2.43)	(-3.54)	(-3.13)	(-3.21)	(-1.80)
Years of Schooling	3.888	3.265	5.527	8.443*	4.617	6.786	4.949	2.777	4.424	6.329*	2.638	4.057
	(0.84)	(0.94)	(1.36)	(1.95)	(1.24)	(1.43)	(1.34)	(0.68)	(1.48)	(1.97)	(0.77)	(0.69)
Lag 1 of TFP Growth	-0.035	-0.031	-0.024	-0.061	-0.062	-0.038						
	(-0.53)	(-0.42)	(-0.39)	(-0.94)	(-0.83)	(-0.73)						
Lag 1 of Capital Stock Growth							0.396***	0.375***	0.363***	0.414***	0.365***	0.399***
							(8.05)	(7.57)	(6.89)	(7.89)	(6.60)	(8.24)
Lag 2 of Capital Stock Growth							-0.020	-0.004	0.018	-0.011	-0.019	0.002
							(-0.34)	(-0.10)	(0.35)	(-0.15)	(-0.30)	(0.03)
Stock Market Turnover*Low Income Dummy		-0.743						-1.515*				
		(-1.26)						(-1.94)				
Stock Market Turnover*Middle Income Dummy		-0.662						-0.886				
		(-1.52)						(-1.41)				
Stock Market Turnover*High Inflation Dummy			-0.430						-0.728**			
			(-1.28)						(-2.21)			
Stock Market Turnover*Middle Inflation Dummy			-0.237						0.173			
			(-0.79)						(0.52)			
Stock Market Turnover*Low Institutional Quality Dummy				1.428**						-0.560		
				(2.58)						(-1.25)		
Stock Market Turnover*Medium Institutional Quality Dummy				0.120						-0.110		
				(0.31)						(-0.38)		
Stock Market Turnover*Low Financial Depth					0.258						-1.393**	
					(0.56)						(-2.27)	
Stock Market Turnover*Medium Financial Depth					0.384						-0.481	
					(1.31)						(-1.40)	
Stock Market Turnover*CCA Dummy						-1.961						0.222
						(-1.60)						(0.08)
Stock Market Turnover*MENAPOI Dummy						-0.154						-0.673
						(-0.15)						(-0.96)
Stock Market Turnover*MENAPOX Dummy						-0.194						1.179
						(-0.17)						(1.60)
Observations	581	581	566	552	577	581	608	608	594	573	605	608
Number of clusters	91.000	91.000	91.000	86.000	91.000	91.000	99.000	99.000	99.000	93.000	99.000	99.000
Number of instruments	44.000	56.000	56.000	56.000	56.000	60.000	47.000	59.000	59.000	59.000	59.000	63.000
Hansen test p-value	0.172	0.101	0.419	0.383	0.159	0.614	0.465	0.081	0.591	0.421	0.208	0.392
A-B AR(1) test p-value	0.003	0.005	0.004	0.002	0.005	0.002	0.002	0.001	0.001	0.002	0.002	0.002
A-B AR(2) test p-value	0.353	0.418	0.052	0.347	0.223	0.296	0.134	0.198	0.377	0.201	0.219	0.270
Lowest number of observations included	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Highest number of observations included	8.000	8.000	8.000	8.000	8.000	8.000	8.000	8.000	8.000	8.000	8.000	8.000
Average number of observations included	6.385	6.385	6.220	6.419	6.341	6.385	6.141	6.141	6.000	6.161	6.111	6.141

Dummy variables for time periods were also included in each model. Results for these are not reported here.
t-statistics in parentheses based on cluster-robust standard errors
* p<0.1 ** p<0.05 *** p<0.01

Table 9: Net Interest Margin

	TFP						Capital					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
Net Interest Margin	-0.420	-1.012	-1.437	0.767	-3.865**	-0.753	-0.857	-0.052	-1.721	0.384	-2.191*	-1.690
	(-0.24)	(-0.60)	(-0.83)	(0.53)	(-2.10)	(-0.24)	(-0.74)	(-0.04)	(-1.42)	(0.38)	(-1.92)	(-0.84)
Initial GDP per Capita	-3.800***	-2.461**	-3.615***	-4.724***	-1.967**	-4.097**	-0.703	-0.764	-0.243	-0.402	-0.758	-0.838
	(-3.79)	(-2.28)	(-4.49)	(-2.97)	(-2.14)	(-2.15)	(-0.55)	(-1.13)	(-0.24)	(-0.34)	(-0.74)	(-0.62)
Trade to GDP	5.766**	4.965*	5.580**	7.448***	2.155	6.976*	2.145	2.280	1.626	2.166*	2.223*	2.567**
	(2.15)	(1.96)	(2.46)	(3.03)	(1.32)	(1.69)	(1.34)	(1.52)	(0.99)	(1.86)	(1.90)	(2.11)
Government Consumption to GDP	-1.277	-3.077	0.577	0.595	-0.048	-5.690	-2.405	-2.551*	-2.685	-0.867	-2.188	-1.022
	(-0.47)	(-0.93)	(0.25)	(0.17)	(-0.02)	(-0.97)	(-1.44)	(-1.85)	(-1.35)	(-0.51)	(-1.44)	(-0.75)
Years of Schooling	4.328	2.320	3.902	2.762	3.113*	1.445	1.327	0.142	0.805	0.284	0.819	-0.351
	(1.55)	(0.86)	(1.38)	(0.59)	(1.67)	(0.27)	(0.45)	(0.06)	(0.35)	(0.09)	(0.35)	(-0.12)
Lag 1 of TFP Growth	0.077	0.145**	0.095	0.108	0.147**	0.136						
	(1.25)	(2.21)	(1.51)	(1.54)	(2.10)	(1.63)						
Lag 1 of Capital Stock Growth							0.745***	0.739***	0.715***	0.730***	0.735***	0.705***
							(6.92)	(7.03)	(5.83)	(4.94)	(7.35)	(5.36)
Lag 2 of Capital Stock Growth							-0.076	-0.072	-0.102	-0.106	-0.078	-0.110
							(-0.51)	(-0.53)	(-0.60)	(-0.57)	(-0.53)	(-0.89)
Net Interest Margin*Low Income Dummy		0.595						-0.897				
		(0.37)						(-0.93)				
Net Interest Margin*Middle Income Dummy		-0.085						-0.952*				
		(-0.13)						(-1.75)				
Net Interest Margin*High Inflation Dummy			0.025						0.443			
			(0.05)						(1.41)			
Net Interest Margin*Middle Inflation Dummy			0.102						0.509**			
			(0.24)						(2.09)			
Net Interest Margin*Low Institutional Quality Dummy				0.154						-0.659		
				(0.13)						(-1.03)		
Net Interest Margin*Medium Institutional Quality Dummy				0.371						-0.228		
				(0.47)						(-0.32)		
Net Interest Margin*Low Financial Depth					1.881***						0.264	
					(3.54)						(0.66)	
Net Interest Margin*Medium Financial Depth					1.462***						0.641**	
					(3.46)						(2.59)	
Net Interest Margin*CCA Dummy						-0.041						-0.388
						(-0.01)						(-0.22)
Net Interest Margin*MENAPOI Dummy						-3.682						1.318
						(-1.57)						(0.43)
Net Interest Margin*MENAPOX Dummy						0.384						1.659
						(0.28)						(1.57)
Observations	423	423	414	378	403	423	496	496	484	438	475	496
Number of clusters	108.000	108.000	108.000	96.000	107.000	108.000	128.000	128.000	128.000	112.000	127.000	128.000
Number of instruments	90.000	96.000	96.000	96.000	96.000	46.000	91.000	97.000	97.000	97.000	97.000	49.000
Hansen test p-value	0.292	0.357	0.372	0.393	0.248	0.249	0.239	0.332	0.361	0.158	0.739	0.156
A-B AR(1) test p-value	0.020	0.015	0.007	0.017	0.003	0.033	0.059	0.052	0.069	0.142	0.045	0.053
A-B AR(2) test p-value	0.059	0.138	0.076	0.114	0.096	0.105	0.776	0.741	0.801	0.447	0.646	0.842
Lowest number of observations included	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Highest number of observations included	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000
Average number of observations included	3.917	3.917	3.833	3.938	3.766	3.917	3.875	3.875	3.781	3.911	3.740	3.875

Dummy variables for time periods were also included in each model. Results for these are not reported here.
t-statistics in parentheses based on cluster-robust standard errors
* p<0.1 ** p<0.05 *** p<0.01

Table 10: Bank Overhead Costs

	TFP						Capital					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
Bank Overhead Costs	-0.793	-1.323	3.215	1.382	1.529	-3.813	0.245	-0.099	0.149	-0.541	0.128	0.520
	(-0.32)	(-0.62)	(1.48)	(0.42)	(0.88)	(-0.95)	(0.36)	(-0.14)	(0.16)	(-0.66)	(0.13)	(0.53)
Initial GDP per Capita	-1.471	-3.669	0.052	-3.799	-0.430	-11.358***	-0.765	-0.985	-0.651	-0.918	-1.032	-1.412*
	(-0.78)	(-1.19)	(0.02)	(-1.40)	(-0.27)	(-3.39)	(-1.12)	(-1.43)	(-1.25)	(-1.08)	(-1.33)	(-1.96)
Trade to GDP	9.218**	9.027*	5.725**	7.606	3.194*	4.610	2.357***	2.580***	2.735***	1.824**	1.600**	2.712***
	(2.14)	(1.87)	(2.10)	(1.54)	(1.82)	(0.80)	(3.36)	(3.39)	(2.79)	(2.61)	(2.26)	(2.96)
Government Consumption to GDP	15.144**	9.876	2.169	21.667**	-1.498	15.233***	0.034	-0.415	0.115	-0.527	-0.709	-0.272
	(2.07)	(1.32)	(0.57)	(2.36)	(-0.67)	(2.63)	(0.03)	(-0.42)	(0.10)	(-0.58)	(-0.52)	(-0.27)
Years of Schooling	-0.122	2.244	2.761	3.656	4.072	15.119	0.662	0.987	-0.661	3.206	1.487	2.687
	(-0.02)	(0.41)	(0.75)	(0.36)	(1.47)	(1.65)	(0.31)	(0.48)	(-0.43)	(1.25)	(0.78)	(0.95)
Lag 1 of TFP Growth	0.053	-0.007	0.216**	0.012	0.209**	0.039						
	(0.38)	(-0.04)	(2.13)	(0.07)	(2.53)	(0.25)						
Lag 1 of Capital Stock Growth							0.765***	0.775***	0.755***	0.782***	0.719***	0.761***
							(5.40)	(6.66)	(7.26)	(4.95)	(5.60)	(7.71)
Lag 2 of Capital Stock Growth							-0.036	-0.009	-0.034	0.019	0.026	-0.011
							(-0.77)	(-0.17)	(-0.67)	(0.34)	(0.54)	(-0.23)
Bank Overhead Costs*Low Income Dummy		-1.555						0.038				
		(-0.55)						(0.05)				
Bank Overhead Costs*Middle Income Dummy		-1.050						-0.648*				
		(-0.69)						(-1.96)				
Bank Overhead Costs*High Inflation Dummy			-0.050						-0.365			
			(-0.05)						(-1.07)			
Bank Overhead Costs*Middle Inflation Dummy			0.297						0.106			
			(0.47)						(0.30)			
Bank Overhead Costs*Low Institutional Quality Dummy				-3.908**						0.090		
				(-2.00)						(0.15)		
Bank Overhead Costs*Medium Institutional Quality Dummy				-4.290**						-0.013		
				(-2.29)						(-0.03)		
Bank Overhead Costs*Low Financial Depth					0.619						-0.240	
					(0.77)						(-0.77)	
Bank Overhead Costs*Medium Financial Depth					0.227						0.017	
					(0.38)						(0.07)	
Bank Overhead Costs*CCA Dummy						-3.407						-2.012*
						(-0.66)						(-1.69)
Bank Overhead Costs*MENAPOI Dummy						-24.311*						1.082
						(-1.83)						(0.63)
Bank Overhead Costs*MENAPOX Dummy						13.423**						-0.528
						(2.17)						(-0.22)
Observations	1252	1252	1234	1123	1162	1252	1466	1466	1441	1302	1367	1466
Number of clusters	108.000	108.000	108.000	96.000	107.000	108.000	128.000	128.000	128.000	112.000	127.000	128.000
Number of instruments	54.000	68.000	68.000	68.000	68.000	75.000	57.000	71.000	71.000	71.000	71.000	78.000
Hansen test p-value	0.138	0.045	0.117	0.097	0.044	0.334	0.315	0.253	0.383	0.073	0.041	0.194
A-B AR(1) test p-value	0.003	0.055	0.000	0.012	0.000	0.009	0.011	0.013	0.011	0.029	0.032	0.010
A-B AR(2) test p-value	0.824	0.598	0.585	0.904	0.302	0.909	0.982	0.905	0.663	0.599	0.886	0.950
Lowest number of observations included	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Highest number of observations included	12.000	12.000	12.000	12.000	12.000	12.000	12.000	12.000	12.000	12.000	12.000	12.000
Average number of observations included	11.593	11.593	11.426	11.698	10.860	11.593	11.453	11.453	11.258	11.625	10.764	11.453

Dummy variables for time periods were also included in each model. Results for these are not reported here.
t-statistics in parentheses based on cluster-robust standard errors
* p<0.1 ** p<0.05 *** p<0.01

Table 11: Non-Performing Loans

	TFP						Capital					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
Non-Performing Loans	-1.619*	-1.376**	-2.411**	-1.759*	-2.911***	-1.770**	-1.398***	-0.752	-2.159**	-1.077**	-1.256***	-1.191**
	(-1.96)	(-2.14)	(-2.24)	(-1.93)	(-3.60)	(-2.13)	(-3.14)	(-1.60)	(-2.47)	(-2.18)	(-3.12)	(-2.25)
Initial GDP per Capita	-2.753**	-2.719**	-3.227***	-4.425***	-1.626**	-3.254**	-0.626	-1.436**	-0.570	-1.298**	-1.085	-1.146
	(-2.43)	(-2.58)	(-3.80)	(-2.81)	(-2.39)	(-2.51)	(-0.63)	(-2.16)	(-0.44)	(-2.30)	(-1.26)	(-1.26)
Trade to GDP	1.837	2.621	0.414	2.967	1.493	3.837	0.010	-1.017	-0.142	1.646	0.641	0.228
	(0.57)	(0.89)	(0.18)	(0.91)	(1.33)	(0.85)	(0.00)	(-0.71)	(-0.06)	(1.41)	(0.42)	(0.11)
Government Consumption to GDP	0.946	0.880	1.899	-0.546	-0.062	1.296	-4.169**	-2.642	-1.155	-1.494	-4.057*	-5.132***
	(0.24)	(0.32)	(0.70)	(-0.13)	(-0.03)	(0.31)	(-2.00)	(-1.12)	(-0.55)	(-0.85)	(-1.81)	(-2.75)
Years of Schooling	3.405	1.844	3.173	3.583	2.210	3.209	5.235*	3.995	3.610	2.152	5.583*	6.374*
	(0.85)	(0.50)	(1.02)	(0.69)	(1.13)	(0.52)	(1.68)	(1.50)	(1.37)	(1.01)	(1.82)	(1.75)
Lag 1 of TFP Growth	-0.056	-0.069	-0.033	-0.123	-0.042	-0.105						
	(-0.75)	(-0.94)	(-0.45)	(-1.59)	(-0.53)	(-1.35)						
Lag 1 of Capital Stock Growth							0.613***	0.610***	0.558**	0.694***	0.602***	0.662***
							(3.22)	(3.72)	(2.56)	(6.48)	(3.84)	(4.25)
Lag 2 of Capital Stock Growth							-0.027	-0.031	0.015	-0.056	-0.030	-0.049
							(-0.39)	(-0.49)	(0.18)	(-1.18)	(-0.54)	(-0.75)
Non-Performing Loans*Low Income Dummy		0.100						-1.540**				
		(0.09)						(-2.49)				
Non-Performing Loans*Middle Income Dummy		-0.546						-0.775*				
		(-1.03)						(-1.71)				
Non-Performing Loans*High Inflation Dummy			0.860						0.684			
			(1.47)						(1.04)			
Non-Performing Loans*Middle Inflation Dummy			-0.037						0.191			
			(-0.07)						(0.38)			
Non-Performing Loans*Low Institutional Quality Dummy				-0.324						-0.669		
				(-0.50)						(-1.15)		
Non-Performing Loans*Medium Institutional Quality Dummy				-0.705						-0.497		
				(-1.05)						(-1.58)		
Non-Performing Loans*Low Financial Depth					1.017*						-0.135	
					(1.90)						(-0.41)	
Non-Performing Loans*Medium Financial Depth					0.499*						-0.026	
					(1.84)						(-0.13)	
Non-Performing Loans*CCA Dummy						0.814						-1.292
						(0.33)						(-0.76)
Non-Performing Loans*MENAPOI Dummy						-1.062						0.010
						(-1.03)						(0.02)
Non-Performing Loans*MENAPOX Dummy						1.486						3.054
						(0.66)						(0.91)
Observations	397	397	389	378	382	397	410	410	403	391	395	410
Number of clusters	90.000	90.000	90.000	84.000	90.000	90.000	95.000	95.000	95.000	89.000	95.000	95.000
Number of instruments	44.000	52.000	52.000	52.000	52.000	56.000	47.000	55.000	55.000	55.000	55.000	59.000
Hansen test p-value	0.121	0.252	0.082	0.203	0.255	0.386	0.355	0.593	0.401	0.196	0.583	0.622
A-B AR(1) test p-value	0.116	0.147	0.062	0.153	0.064	0.232	0.069	0.040	0.070	0.004	0.051	0.032
A-B AR(2) test p-value	0.133	0.174	0.105	0.100	0.062	0.073	0.675	0.553	0.229	0.313	0.536	0.698
Lowest number of observations included	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Highest number of observations included	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000
Average number of observations included	4.411	4.411	4.322	4.500	4.244	4.411	4.316	4.316	4.242	4.393	4.158	4.316

Dummy variables for time periods were also included in each model. Results for these are not reported here.
t-statistics in parentheses based on cluster-robust standard errors
* p<0.1 ** p<0.05 *** p<0.01

Table 12: Stock Price Volatility

	TFP						Capital					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
Stock Price Volatility	1.735	-0.442	2.391	0.088	-1.524	2.088	0.309	-0.435	-0.952	-0.288	-0.651	-1.764
	(0.60)	(-0.17)	(0.65)	(0.04)	(-0.47)	(1.04)	(0.08)	(-0.24)	(-0.31)	(-0.17)	(-0.27)	(-1.15)
Initial GDP per Capita	-1.656	-2.366**	-2.833*	0.128	-2.040	-2.361	0.296	-0.494	0.148	0.244	0.950	-0.797
	(-1.41)	(-2.24)	(-1.78)	(0.07)	(-1.06)	(-1.37)	(0.11)	(-0.25)	(0.09)	(0.17)	(0.63)	(-0.43)
Trade to GDP	1.339	0.040	1.478	2.987*	1.603	2.036	3.743	3.821**	2.131	2.600	5.540**	2.431
	(0.73)	(0.04)	(0.74)	(1.67)	(0.79)	(0.85)	(1.25)	(2.21)	(0.79)	(1.34)	(2.23)	(1.38)
Government Consumption to GDP	2.944	2.170	1.876	1.880	0.198	2.378	-7.031	-6.675*	-6.741	-3.673	-8.038*	-9.491***
	(0.84)	(0.48)	(0.59)	(0.46)	(0.06)	(0.70)	(-1.26)	(-1.73)	(-1.35)	(-1.14)	(-1.77)	(-3.42)
Years of Schooling	5.131*	5.775	7.359*	-0.762	7.071	6.793*	2.954	5.027	-0.278	2.309	0.010	5.184
	(1.68)	(1.65)	(1.90)	(-0.21)	(1.52)	(1.75)	(0.42)	(1.03)	(-0.07)	(0.80)	(0.00)	(1.44)
Lag 1 of TFP Growth	0.039	0.034	0.069	0.069	0.028	0.018						
	(0.29)	(0.34)	(0.64)	(0.99)	(0.18)	(0.15)						
Lag 1 of Capital Stock Growth							0.370***	0.366***	0.338***	0.382***	0.366***	0.386***
							(4.39)	(5.77)	(3.93)	(5.13)	(4.60)	(4.32)
Lag 2 of Capital Stock Growth							0.003	-0.001	0.006	-0.022	-0.017	0.028
							(0.04)	(-0.02)	(0.11)	(-0.36)	(-0.22)	(0.45)
Stock Price Volatility*Low Income Dummy		1.313						0.428				
		(1.07)						(0.35)				
Stock Price Volatility*Middle Income Dummy		0.022						0.183				
		(0.03)						(0.27)				
Stock Price Volatility*High Inflation Dummy			-0.008						-0.675			
			(-0.01)						(-1.12)			
Stock Price Volatility*Middle Inflation Dummy			-0.916**						0.203			
			(-2.12)						(0.47)			
Stock Price Volatility*Low Institutional Quality Dummy				2.294***						0.449		
				(2.84)						(0.72)		
Stock Price Volatility*Medium Institutional Quality Dummy				0.789						0.840		
				(1.20)						(1.59)		
Stock Price Volatility*Low Financial Depth					1.434						-0.398	
					(1.59)						(-0.60)	
Stock Price Volatility*Medium Financial Depth					0.672						0.099	
					(1.51)						(0.15)	
Stock Price Volatility*CCA Dummy						-2.311						-1.962
						(-0.57)						(-0.49)
Stock Price Volatility*MENAPOI Dummy						-0.272						0.876
						(-0.53)						(0.89)
Stock Price Volatility*MENAPOX Dummy						-0.356						1.635
						(-0.22)						(0.85)
Observations	435	435	422	410	421	435	436	436	423	413	422	436
Number of clusters	73.000	73.000	73.000	72.000	73.000	73.000	75.000	75.000	75.000	74.000	75.000	75.000
Number of instruments	40.000	48.000	48.000	41.000	48.000	51.000	42.000	50.000	50.000	44.000	50.000	53.000
Hansen test p-value	0.198	0.169	0.456	0.009	0.193	0.573	0.207	0.271	0.639	0.387	0.359	0.703
A-B AR(1) test p-value	0.075	0.011	0.082	0.019	0.054	0.079	0.038	0.035	0.041	0.046	0.032	0.030
A-B AR(2) test p-value	0.770	0.993	0.717	0.524	0.922	0.624	0.396	0.212	0.292	0.089	0.147	0.746
Lowest number of observations included	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Highest number of observations included	16.000	16.000	16.000	9.000	16.000	16.000	15.000	15.000	15.000	9.000	15.000	15.000
Average number of observations included	5.959	5.959	5.781	5.694	5.767	5.959	5.813	5.813	5.640	5.581	5.627	5.813

Dummy variables for time periods were also included in each model. Results for these are not reported here.
t-statistics in parentheses based on cluster-robust standard errors
* p<0.1 ** p<0.05 *** p<0.01

Table 13: Bank Z-Score

	TFP						Capital					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
Bank Z-Score	1.176	0.489	0.418	1.634	-0.468	0.683	0.510	0.740	-0.209	1.037	-0.549	0.361
	(1.08)	(0.43)	(0.43)	(1.15)	(-0.44)	(0.63)	(0.72)	(1.00)	(-0.25)	(1.20)	(-0.74)	(0.28)
Initial GDP per Capita	-3.862***	-2.757**	-3.027***	-5.365***	-1.610*	-4.668*	-0.898	-1.053	-0.005	-0.726	-0.709	-0.019
	(-2.94)	(-2.43)	(-3.40)	(-3.18)	(-1.80)	(-1.94)	(-0.70)	(-1.26)	(-0.01)	(-0.59)	(-0.55)	(-0.02)
Trade to GDP	7.460***	7.728***	6.225**	7.876**	4.321**	11.216***	1.943	2.013*	1.271	1.628	2.342*	3.089**
	(3.01)	(2.87)	(2.57)	(2.54)	(2.10)	(3.87)	(1.58)	(1.79)	(0.70)	(1.29)	(1.98)	(2.16)
Government Consumption to GDP	-1.213	-1.957	-1.560	0.479	0.298	-1.336	-3.169*	-3.158**	-4.027*	-1.247	-3.240***	-0.931
	(-0.46)	(-0.70)	(-0.62)	(0.14)	(0.14)	(-0.32)	(-1.81)	(-2.21)	(-1.77)	(-0.78)	(-2.85)	(-0.59)
Years of Schooling	2.235	1.195	1.678	1.720	1.141	2.954	2.019	1.000	1.590	1.157	1.902	-1.753
	(0.62)	(0.36)	(0.53)	(0.31)	(0.54)	(0.44)	(0.54)	(0.42)	(0.52)	(0.30)	(0.54)	(-0.57)
Lag 1 of TFP Growth	0.117**	0.164**	0.135**	0.124*	0.153**	0.189*						
	(2.01)	(2.47)	(2.12)	(1.79)	(2.23)	(1.87)						
Lag 1 of Capital Stock Growth							0.731***	0.744***	0.677***	0.757***	0.673***	0.782***
							(6.26)	(7.17)	(4.89)	(5.76)	(5.22)	(7.83)
Lag 2 of Capital Stock Growth							-0.065	-0.042	-0.083	-0.088	-0.061	-0.047
							(-0.43)	(-0.27)	(-0.44)	(-0.49)	(-0.39)	(-0.33)
Bank Z-Score*Low Income Dummy		0.769						-0.685				
		(0.80)						(-0.99)				
Bank Z-Score		-0.057						-0.556				
*Middle Income Dummy		(-0.09)						(-1.63)				
Bank Z-Score			0.039						0.236			
*High Inflation Dummy			(0.11)						(0.90)			
Bank Z-Score			-0.013						0.382			
*Middle Inflation Dummy			(-0.04)						(1.47)			
Bank Z-Score				-0.219						-0.501		
*Low Institutional Quality Dummy				(-0.27)						(-0.96)		
Bank Z-Score				0.202						-0.025		
*Medium Institutional Quality Dummy				(0.35)						(-0.05)		
Bank Z-Score					0.877						0.163	
*Low Financial Depth					(1.54)						(0.48)	
Bank Z-Score					0.725**						0.350	
*Medium Financial Depth					(2.08)						(1.61)	
Bank Z-Score						-5.201						0.165
*CCA Dummy						(-1.07)						(0.05)
Bank Z-Score						-3.367*						-0.121
*MENAPOI Dummy						(-1.69)						(-0.18)
Bank Z-Score						-0.728						0.666
*MENAPOX Dummy						(-0.94)						(1.55)
Observations	419	419	410	374	399	419	489	489	477	433	468	489
Number of clusters	107.000	107.000	107.000	96.000	106.000	107.000	125.000	125.000	125.000	111.000	124.000	125.000
Number of instruments	90.000	96.000	96.000	96.000	96.000	46.000	91.000	97.000	97.000	97.000	97.000	49.000
Hansen test p-value	0.365	0.254	0.425	0.376	0.301	0.834	0.167	0.331	0.229	0.250	0.582	0.172
A-B AR(1) test p-value	0.004	0.006	0.002	0.006	0.006	0.033	0.077	0.075	0.088	0.144	0.082	0.073
A-B AR(2) test p-value	0.079	0.111	0.093	0.168	0.077	0.106	0.484	0.524	0.614	0.301	1.000	0.600
Lowest number of observations included	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Highest number of observations included	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000
Average number of observations included	3.916	3.916	3.832	3.896	3.764	3.916	3.912	3.912	3.816	3.901	3.774	3.912

Dummy variables for time periods were also included in each model. Results for these are not reported here.
t-statistics in parentheses based on cluster-robust standard errors
* p<0.1 ** p<0.05 *** p<0.01

Table 14: Loan-to-Deposit Ratio

	TFP						Capital					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
Loan-to-Deposit Ratio	-0.544	-1.167*	-0.362	-1.259	-0.816	-0.395	-0.125	0.246	0.290	-0.318	-0.995	0.207
	(-0.76)	(-1.73)	(-0.48)	(-1.25)	(-0.93)	(-0.47)	(-0.24)	(0.39)	(0.51)	(-0.48)	(-1.65)	(0.30)
Initial GDP per Capita	-1.820***	-0.392	-1.714***	-2.851***	-0.970*	-2.071***	-0.669	-1.121	-1.070	-0.565	-0.289	-0.732
	(-3.37)	(-0.52)	(-2.88)	(-2.91)	(-1.94)	(-3.32)	(-1.03)	(-1.58)	(-1.59)	(-0.65)	(-0.65)	(-1.03)
Trade to GDP	0.103	1.162	0.351	-0.033	0.724	-0.838	2.474***	2.463***	2.484***	2.705**	2.512***	2.720***
	(0.12)	(1.44)	(0.43)	(-0.03)	(0.93)	(-0.84)	(3.10)	(3.13)	(3.16)	(2.56)	(3.09)	(3.26)
Government Consumption to GDP	0.398	-0.073	0.265	0.100	0.395	-0.425	-2.161***	-1.709**	-2.338***	-3.027***	-2.081***	-2.213***
	(0.82)	(-0.15)	(0.53)	(0.08)	(0.79)	(-0.74)	(-3.27)	(-2.49)	(-3.45)	(-4.06)	(-3.65)	(-2.98)
Years of Schooling	3.825**	3.244**	3.227**	5.213**	2.092*	4.680***	1.492	0.712	2.193	1.805	-0.562	0.575
	(2.42)	(2.20)	(2.19)	(2.59)	(1.84)	(2.77)	(0.87)	(0.50)	(1.41)	(0.87)	(-0.45)	(0.36)
Lag 1 of TFP Growth	0.030	0.049	0.058	-0.021	0.081	-0.026						
	(0.56)	(0.75)	(1.10)	(-0.32)	(1.39)	(-0.45)						
Lag 1 of Capital Stock Growth							0.583***	0.589***	0.623***	0.655***	0.616***	0.562***
							(7.28)	(7.24)	(8.77)	(7.83)	(9.20)	(6.44)
Lag 2 of Capital Stock Growth							-0.067	-0.048	-0.071	-0.111	-0.103*	-0.080
							(-1.15)	(-0.85)	(-1.41)	(-1.56)	(-1.74)	(-1.27)
Loan-to-Deposit Ratio*Low Income Dummy		0.740						-0.432				
		(1.54)						(-1.09)				
Loan-to-Deposit Ratio*Middle Income Dummy		0.142						-0.094				
		(0.81)						(-0.51)				
Loan-to-Deposit Ratio*High Inflation Dummy			-0.093						-0.093			
			(-0.41)						(-0.69)			
Loan-to-Deposit Ratio*Middle Inflation Dummy			-0.070						-0.077			
			(-0.39)						(-0.58)			
Loan-to-Deposit Ratio*Low Institutional Quality Dummy				-0.218						-0.148		
				(-0.74)						(-0.67)		
Loan-to-Deposit Ratio*Medium Institutional Quality Dummy				-0.027						-0.142		
				(-0.12)						(-0.77)		
Loan-to-Deposit Ratio*Low Financial Depth					0.109						-0.370	
					(0.40)						(-1.43)	
Loan-to-Deposit Ratio*Medium Financial Depth					0.014						-0.091	
					(0.09)						(-0.57)	
Loan-to-Deposit Ratio*CCA Dummy						-0.112						-0.021
						(-0.10)						(-0.01)
Loan-to-Deposit Ratio*MENAPOI Dummy						-0.876						1.124**
						(-0.96)						(2.45)
Loan-to-Deposit Ratio*MENAPOX Dummy						-0.340						0.067
						(-0.73)						(0.08)
Observations	755	755	735	564	716	755	879	879	856	649	816	879
Number of clusters	108.000	108.000	108.000	96.000	108.000	108.000	128.000	128.000	128.000	112.000	128.000	128.000
Number of instruments	73.000	93.000	93.000	82.000	93.000	62.000	73.000	93.000	93.000	83.000	93.000	63.000
Hansen test p-value	0.062	0.204	0.224	0.124	0.217	0.054	0.064	0.095	0.179	0.061	0.350	0.009
A-B AR(1) test p-value	0.000	0.000	0.000	0.004	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.001
A-B AR(2) test p-value	0.820	0.808	0.561	0.686	0.407	0.772	0.661	0.796	0.573	0.549	0.911	0.591
Lowest number of observations included	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Highest number of observations included	10.000	10.000	10.000	7.000	10.000	10.000	9.000	9.000	9.000	7.000	9.000	9.000
Average number of observations included	6.991	6.991	6.806	5.875	6.630	6.991	6.867	6.867	6.688	5.795	6.375	6.867

Dummy variables for time periods were also included in each model. Results for these are not reported here.
t-statistics in parentheses based on cluster-robust standard errors
* p<0.1 ** p<0.05 *** p<0.01

Table 15: Capital Adequacy Ratio

	TFP						Capital					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
Capital Adequacy Ratio	6.712**	2.496	7.199**	5.295*	2.074	3.879	0.138	0.800	-0.248	0.466	-0.363	-0.066
	(2.20)	(0.55)	(2.53)	(1.78)	(0.43)	(1.42)	(0.09)	(0.83)	(-0.15)	(0.49)	(-0.24)	(-0.06)
Initial GDP per Capita	-0.103	-1.026	-0.324	-1.107	-0.680	-0.475	-0.410	-0.340	-0.525	-0.209	-0.323	-0.364
	(-0.07)	(-0.77)	(-0.19)	(-0.77)	(-0.44)	(-0.28)	(-0.88)	(-0.70)	(-0.81)	(-0.45)	(-0.58)	(-0.77)
Trade to GDP	5.281	2.268	4.360	2.730	1.894	5.487*	-0.253	0.186	0.141	0.629	-0.251	0.179
	(1.31)	(0.67)	(1.19)	(0.80)	(0.71)	(1.90)	(-0.28)	(0.34)	(0.17)	(1.25)	(-0.28)	(0.30)
Government Consumption to GDP	3.977	4.669	0.783	3.188	1.349	-2.852	-2.414	-1.762*	-1.578	-1.268*	-3.323**	-2.785**
	(0.88)	(1.02)	(0.19)	(0.78)	(0.43)	(-0.78)	(-1.54)	(-1.69)	(-1.48)	(-1.87)	(-2.06)	(-2.54)
Years of Schooling	2.924	6.405	7.394	10.467**	5.713*	2.126	1.057	0.351	0.301	1.184	1.349	0.634
	(0.84)	(1.57)	(1.61)	(2.43)	(1.87)	(0.44)	(0.73)	(0.26)	(0.23)	(1.12)	(0.98)	(0.47)
Lag 1 of TFP Growth	0.310***	0.261***	0.249***	0.295***	0.206***	0.255***						
	(4.36)	(4.27)	(2.85)	(3.97)	(3.24)	(3.15)						
Lag 1 of Capital Stock Growth							0.981***	1.056***	0.940***	1.093***	1.023***	0.942***
							(7.85)	(11.58)	(8.43)	(12.87)	(13.29)	(11.34)
Lag 2 of Capital Stock Growth							-0.207***	-0.215***	-0.213***	-0.199**	-0.201***	-0.208***
							(-3.21)	(-3.22)	(-3.39)	(-2.31)	(-3.16)	(-3.71)
Capital Adequacy Ratio*Low Income Dummy		-0.364						-0.487*				
		(-0.31)						(-1.70)				
Capital Adequacy Ratio*Middle Income Dummy		0.569						-0.174				
		(0.46)						(-1.02)				
Capital Adequacy Ratio*High Inflation Dummy			0.220						-0.007			
			(0.37)						(-0.04)			
Capital Adequacy Ratio*Middle Inflation Dummy			0.091						0.248*			
			(0.15)						(1.70)			
Capital Adequacy Ratio*Low Institutional Quality Dummy				-0.773						-0.069		
				(-1.64)						(-0.39)		
Capital Adequacy Ratio*Medium Institutional Quality Dummy				-0.583*						-0.180		
				(-1.91)						(-1.07)		
Capital Adequacy Ratio*Low Financial Depth					0.615						-0.140	
					(0.96)						(-0.67)	
Capital Adequacy Ratio*Medium Financial Depth					0.382						0.016	
					(1.03)						(0.12)	
Capital Adequacy Ratio*CCA Dummy						-0.366						0.621
						(-0.13)						(0.54)
Capital Adequacy Ratio*MENAPOI Dummy						-3.809						-0.019
						(-0.96)						(-0.01)
Capital Adequacy Ratio*MENAPOX Dummy						0.844						1.036*
						(0.38)						(1.81)
Observations	1009	1009	1000	964	941	1009	1067	1067	1058	1022	999	1067
Number of clusters	90.000	90.000	90.000	84.000	90.000	90.000	95.000	95.000	95.000	89.000	95.000	95.000
Number of instruments	49.000	61.000	61.000	61.000	61.000	67.000	52.000	64.000	64.000	64.000	64.000	70.000
Hansen test p-value	0.625	0.281	0.510	0.717	0.225	0.443	0.387	0.496	0.456	0.254	0.312	0.686
A-B AR(1) test p-value	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.002	0.001	0.002	0.003	0.002
A-B AR(2) test p-value	0.677	0.637	0.650	0.831	0.878	0.640	0.098	0.089	0.087	0.124	0.109	0.102
Lowest number of observations included	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Highest number of observations included	13.000	13.000	13.000	13.000	13.000	13.000	13.000	13.000	13.000	13.000	13.000	13.000
Average number of observations included	11.211	11.211	11.111	11.476	10.456	11.211	11.232	11.232	11.137	11.483	10.516	11.232

Dummy variables for time periods were also included in each model. Results for these are not reported here.
t-statistics in parentheses based on cluster-robust standard errors
* p<0.1 ** p<0.05 *** p<0.01

Table 16: Foreign Claims to GDP

	TFP						Capital					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
Foreign Claims to GDP	-0.537**	-0.669*	-0.610	-0.763*	-0.629***	-0.421	-0.621*	-0.733**	-0.570*	-1.125***	-0.536	-0.420
	(-2.18)	(-1.83)	(-1.55)	(-1.67)	(-2.84)	(-1.32)	(-1.94)	(-2.49)	(-1.81)	(-3.15)	(-1.62)	(-1.23)
Initial GDP per Capita	-1.067*	-0.146	-1.177	-1.359	-0.488	-1.402**	-0.202	-0.193	-0.135	-0.979	-0.748	-0.607
	(-1.78)	(-0.20)	(-1.42)	(-1.30)	(-0.86)	(-1.99)	(-0.28)	(-0.28)	(-0.19)	(-1.37)	(-1.07)	(-0.70)
Trade to GDP	1.330	1.717	0.810	1.587	1.173	1.303	3.013***	3.061***	2.857***	2.201**	3.053***	2.089**
	(1.20)	(1.38)	(0.54)	(1.16)	(1.29)	(1.03)	(3.32)	(3.46)	(3.37)	(2.19)	(3.62)	(2.59)
Government Consumption to GDP	0.816	0.203	0.370	1.531	1.345	-0.404	-2.726***	-2.520***	-3.072***	-2.700***	-2.832***	-2.662***
	(0.82)	(0.19)	(0.26)	(1.21)	(1.33)	(-0.41)	(-4.48)	(-4.53)	(-4.34)	(-4.59)	(-4.71)	(-4.71)
Years of Schooling	3.397**	3.079**	3.933*	3.045	2.384	4.113**	-0.121	0.492	-0.244	2.279	-0.040	0.943
	(2.48)	(2.10)	(1.78)	(1.34)	(1.65)	(2.36)	(-0.06)	(0.28)	(-0.14)	(1.26)	(-0.02)	(0.46)
Lag 1 of TFP Growth	0.032	0.077	-0.000	0.049	0.089	0.010						
	(0.58)	(1.20)	(-0.01)	(0.88)	(1.41)	(0.16)						
Lag 1 of Capital Stock Growth							0.708***	0.704***	0.650***	0.675***	0.626***	0.663***
							(10.34)	(9.99)	(9.42)	(10.77)	(8.26)	(9.78)
Lag 2 of Capital Stock Growth							-0.077	-0.061	-0.070	-0.045	-0.092	-0.090
							(-1.13)	(-0.78)	(-1.34)	(-0.66)	(-1.59)	(-1.39)
Foreign Claims to GDP*Low Income Dummy		1.405**						0.378				
		(2.47)						(0.65)				
Foreign Claims to GDP*Middle Income Dummy		0.298						-0.094				
		(1.32)						(-0.30)				
Foreign Claims to GDP*High Inflation Dummy			0.057						-0.056			
			(0.14)						(-0.21)			
Foreign Claims to GDP*Middle Inflation Dummy			-0.313						0.224			
			(-1.25)						(1.01)			
Foreign Claims to GDP*Low Institutional Quality Dummy				-0.129						-0.481		
				(-0.47)						(-1.61)		
Foreign Claims to GDP*Medium Institutional Quality Dummy				-0.049						-0.354		
				(-0.23)						(-1.41)		
Foreign Claims to GDP*Low Financial Depth					0.595						-1.051**	
					(1.35)						(-2.52)	
Foreign Claims to GDP*Medium Financial Depth					0.145						-0.533*	
					(0.70)						(-1.94)	
Foreign Claims to GDP*CCA Dummy						-0.091						0.508
						(-0.12)						(0.50)
Foreign Claims to GDP*MENAPOI Dummy						-2.410						-0.766
						(-1.10)						(-0.44)
Foreign Claims to GDP*MENAPOX Dummy						0.317						-0.427
						(0.30)						(-0.31)
Observations	589	589	570	530	545	589	714	714	690	615	653	714
Number of clusters	107.000	107.000	107.000	95.000	107.000	107.000	127.000	127.000	127.000	111.000	127.000	127.000
Number of instruments	66.000	78.000	78.000	78.000	78.000	59.000	67.000	79.000	79.000	79.000	79.000	62.000
Hansen test p-value	0.135	0.239	0.036	0.284	0.265	0.093	0.084	0.274	0.101	0.210	0.420	0.110
A-B AR(1) test p-value	0.000	0.000	0.002	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
A-B AR(2) test p-value	0.879	0.555	0.556	0.842	0.364	0.992	0.685	0.621	0.074	0.204	0.387	0.825
Lowest number of observations included	2.000	2.000	2.000	2.000	1.000	2.000	2.000	2.000	2.000	2.000	1.000	2.000
Highest number of observations included	7.000	7.000	7.000	7.000	7.000	7.000	7.000	7.000	7.000	7.000	7.000	7.000
Average number of observations included	5.505	5.505	5.327	5.579	5.093	5.505	5.622	5.622	5.433	5.541	5.142	5.622

Dummy variables for time periods were also included in each model. Results for these are not reported here.
t-statistics in parentheses based on cluster-robust standard errors
* p<0.1 ** p<0.05 *** p<0.01

Table 17: Chinn Ito Index

	TFP						Capital					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
Chinn Ito Index	-0.441	-1.796	0.725	-0.511	-0.898	-0.441	0.602	1.042	0.792	-0.045	0.373	0.944
	(-0.47)	(-1.62)	(0.55)	(-0.51)	(-1.13)	(-0.48)	(0.77)	(1.03)	(0.74)	(-0.04)	(0.38)	(0.97)
Initial GDP per Capita	-1.704***	-0.718	-2.377***	-2.496***	-1.085**	-1.822***	-1.182*	-1.231*	-1.365	-1.277*	-0.210	-0.982
	(-2.89)	(-0.99)	(-3.01)	(-3.39)	(-2.11)	(-2.93)	(-1.92)	(-1.71)	(-1.54)	(-1.68)	(-0.35)	(-1.32)
Trade to GDP	1.272	1.812*	0.728	0.176	1.326*	1.083	2.725***	2.868***	1.920**	2.333**	2.892***	2.228***
	(1.31)	(1.94)	(0.77)	(0.11)	(1.85)	(1.22)	(3.73)	(3.93)	(2.16)	(2.22)	(3.42)	(2.87)
Government Consumption to GDP	0.459	0.713	0.071	1.613	0.729	0.151	-1.932***	-1.940***	-2.147***	-2.304***	-2.297***	-2.252***
	(0.62)	(1.08)	(0.10)	(1.40)	(0.86)	(0.19)	(-3.13)	(-3.23)	(-3.49)	(-3.47)	(-3.77)	(-3.20)
Years of Schooling	3.287*	2.614	4.797***	4.529*	2.256*	3.044*	1.667	1.499	2.962	3.494*	0.195	0.611
	(1.91)	(1.53)	(2.64)	(1.84)	(1.69)	(1.73)	(1.07)	(0.97)	(1.46)	(1.78)	(0.15)	(0.31)
Lag 1 of TFP Growth	0.012	0.036	0.026	0.009	0.068	-0.037						
	(0.20)	(0.62)	(0.51)	(0.13)	(1.05)	(-0.70)						
Lag 1 of Capital Stock Growth							0.632***	0.599***	0.627***	0.656***	0.615***	0.541***
							(7.10)	(7.20)	(8.42)	(8.27)	(7.12)	(5.98)
Lag 2 of Capital Stock Growth							-0.050	-0.040	-0.040	-0.058	-0.062	-0.093
							(-0.86)	(-0.72)	(-0.68)	(-0.94)	(-1.02)	(-1.46)
Chinn Ito Index*Low Income Dummy		8.213*						-0.052				
		(1.93)						(-0.03)				
Chinn Ito Index*Middle Income Dummy		0.012						-0.695				
		(0.01)						(-0.51)				
Chinn Ito Index*High Inflation Dummy			-2.033						-2.515			
			(-1.01)						(-1.54)			
Chinn Ito Index*Middle Inflation Dummy			-1.066						-0.613			
			(-0.93)						(-0.72)			
Chinn Ito Index*Low Institutional Quality Dummy				-1.636						0.364		
				(-0.73)						(0.21)		
Chinn Ito Index*Medium Institutional Quality Dummy				-0.146						-0.002		
				(-0.15)						(-0.00)		
Chinn Ito Index*Low Financial Depth					1.228						0.112	
					(0.47)						(0.07)	
Chinn Ito Index*Medium Financial Depth					1.000						0.994	
					(0.70)						(1.03)	
Chinn Ito Index*CCA Dummy						2.197						3.646
						(0.58)						(1.11)
Chinn Ito Index*MENAPOI Dummy						-2.445						0.580
						(-1.63)						(0.25)
Chinn Ito Index*MENAPOX Dummy						-5.769						-5.643
						(-1.17)						(-1.20)
Observations	743	743	723	570	682	743	887	887	864	651	805	887
Number of clusters	107.000	107.000	106.000	95.000	106.000	107.000	126.000	126.000	125.000	110.000	125.000	126.000
Number of instruments	70.000	86.000	86.000	80.000	86.000	60.000	71.000	87.000	87.000	81.000	87.000	63.000
Hansen test p-value	0.033	0.091	0.146	0.298	0.230	0.030	0.008	0.043	0.046	0.102	0.128	0.005
A-B AR(1) test p-value	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.001
A-B AR(2) test p-value	0.992	0.627	0.777	0.696	0.491	0.558	0.935	0.988	0.294	0.166	0.695	0.683
Lowest number of observations included	1.000	1.000	2.000	1.000	1.000	1.000	1.000	1.000	2.000	1.000	1.000	1.000
Highest number of observations included	9.000	9.000	9.000	7.000	9.000	9.000	9.000	9.000	9.000	7.000	9.000	9.000
Average number of observations included	6.944	6.944	6.821	6.000	6.434	6.944	7.040	7.040	6.912	5.918	6.440	7.040

Dummy variables for time periods were also included in each model. Results for these are not reported here.
t-statistics in parentheses based on cluster-robust standard errors
* p<0.1 ** p<0.05 *** p<0.01

Table 18: Assets and Liabilities to GDP

	TFP						Capital					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
Assets and Liabilities to GDP	-0.179	-0.404	0.164	0.469	-0.215	0.249	-0.911**	-0.826	-0.856	-1.414***	-1.009**	-0.879**
	(-0.39)	(-0.96)	(0.32)	(0.76)	(-0.47)	(0.34)	(-2.02)	(-1.60)	(-1.59)	(-3.59)	(-2.22)	(-2.02)
Initial GDP per Capita	-1.619**	-0.463	-2.006***	-2.919***	-1.116*	-2.262**	-0.198	-0.391	-0.354	0.339	0.169	0.011
	(-2.53)	(-0.47)	(-2.65)	(-3.05)	(-1.67)	(-2.21)	(-0.27)	(-0.40)	(-0.41)	(0.37)	(0.26)	(0.02)
Trade to GDP	0.797	1.486*	0.113	-0.353	0.943	0.415	3.020***	3.281***	3.024***	3.144***	3.111***	2.827***
	(0.94)	(1.72)	(0.12)	(-0.23)	(1.26)	(0.38)	(3.46)	(3.60)	(3.33)	(3.00)	(3.34)	(4.14)
Government Consumption to GDP	0.727	0.214	0.270	1.132	0.805	-0.295	-2.156***	-1.966***	-1.951***	-2.408***	-1.845***	-2.077***
	(0.91)	(0.28)	(0.30)	(0.85)	(0.78)	(-0.30)	(-2.97)	(-2.87)	(-2.84)	(-3.44)	(-3.56)	(-3.53)
Years of Schooling	3.597**	3.006**	4.840**	5.859***	2.571**	5.019**	-0.097	-0.598	0.052	-0.703	-0.960	-0.847
	(2.24)	(2.25)	(2.58)	(3.04)	(2.30)	(2.41)	(-0.05)	(-0.40)	(0.03)	(-0.37)	(-0.72)	(-0.49)
Lag 1 of TFP Growth	0.022	0.073	0.018	0.021	0.057	-0.002						
	(0.44)	(1.19)	(0.35)	(0.32)	(0.81)	(-0.04)						
Lag 1 of Capital Stock Growth							0.604***	0.597***	0.610***	0.661***	0.598***	0.534***
							(8.13)	(8.59)	(9.02)	(9.75)	(8.33)	(7.50)
Lag 2 of Capital Stock Growth							-0.063	-0.051	-0.058	-0.105*	-0.087	-0.079
							(-1.05)	(-0.82)	(-1.09)	(-1.83)	(-1.45)	(-1.28)
Assets and Liabilities to GDP*Low Income Dummy		0.777*						-0.092				
		(1.76)						(-0.19)				
Assets and Liabilities to GDP*Middle Income Dummy		0.142						-0.134				
		(0.68)						(-0.58)				
Assets and Liabilities to GDP*High Inflation Dummy			-0.059						-0.100			
			(-0.23)						(-0.52)			
Assets and Liabilities to GDP*Middle Inflation Dummy			0.028						-0.076			
			(0.13)						(-0.51)			
Assets and Liabilities to GDP*Low Institutional Quality Dummy				-0.170						-0.131		
				(-0.63)						(-0.58)		
Assets and Liabilities to GDP*Medium Institutional Quality Dummy				-0.034						-0.099		
				(-0.18)						(-0.59)		
Assets and Liabilities to GDP*Low Financial Depth					0.071						-0.090	
					(0.27)						(-0.37)	
Assets and Liabilities to GDP*Medium Financial Depth					0.043						0.056	
					(0.24)						(0.34)	
Assets and Liabilities to GDP*CCA Dummy						-0.222						0.029
						(-0.53)						(0.09)
Assets and Liabilities to GDP*MENAPOI Dummy						-1.472						0.360
						(-1.47)						(0.81)
Assets and Liabilities to GDP*MENAPOX Dummy						-0.100						-0.152
						(-0.27)						(-0.66)
Observations	751	751	732	584	692	751	900	900	878	668	816	900
Number of clusters	108.000	108.000	108.000	97.000	108.000	108.000	128.000	128.000	128.000	113.000	128.000	128.000
Number of instruments	70.000	86.000	86.000	80.000	86.000	61.000	71.000	87.000	87.000	81.000	87.000	64.000
Hansen test p-value	0.075	0.235	0.211	0.205	0.198	0.046	0.055	0.075	0.174	0.157	0.139	0.137
A-B AR(1) test p-value	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.001
A-B AR(2) test p-value	0.904	0.643	0.744	0.917	0.537	0.927	0.897	0.918	0.340	0.253	0.743	0.816
Lowest number of observations included	2.000	2.000	2.000	2.000	1.000	2.000	2.000	2.000	2.000	2.000	1.000	2.000
Highest number of observations included	9.000	9.000	9.000	7.000	9.000	9.000	9.000	9.000	9.000	7.000	9.000	9.000
Average number of observations included	6.954	6.954	6.778	6.021	6.407	6.954	7.031	7.031	6.859	5.912	6.375	7.031

Dummy variables for time periods were also included in each model. Results for these are not reported here.
t-statistics in parentheses based on cluster-robust standard errors
* p<0.1 ** p<0.05 *** p<0.01

Table 19: Bank Branches

	TFP						Capital					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
Bank Branches	-0.781	0.091	-1.615	0.237	1.582	1.083	0.486	-0.040	-0.660	0.061	0.860	1.530
	(-0.31)	(0.03)	(-0.70)	(0.07)	(0.68)	(0.37)	(0.56)	(-0.05)	(-0.90)	(0.08)	(1.43)	(1.37)
Initial GDP per Capita	-0.440	-1.079	-0.740	-2.561	0.169	-2.276	0.168	0.253	-0.112	0.519	0.207	-0.823
	(-0.22)	(-0.42)	(-0.44)	(-0.67)	(0.12)	(-1.28)	(0.31)	(0.45)	(-0.13)	(0.42)	(0.45)	(-0.76)
Trade to GDP	5.767	2.353	7.263**	4.285	0.983	6.465	0.196	0.223	0.836	0.328	-0.591	1.017
	(1.27)	(0.54)	(2.21)	(1.33)	(0.43)	(1.43)	(0.15)	(0.23)	(0.63)	(0.37)	(-0.41)	(1.00)
Government Consumption to GDP	0.711	-1.749	-1.082	-2.950	-3.096	-3.298	-1.925**	-1.991	-0.997	-2.121	-2.865**	-1.164
	(0.15)	(-0.50)	(-0.24)	(-0.91)	(-0.87)	(-0.80)	(-2.03)	(-1.37)	(-0.63)	(-1.48)	(-2.18)	(-0.74)
Years of Schooling	-4.204	2.144	-6.743	2.116	1.454	-2.622	-1.941	-1.747	-1.915	-1.220	-0.027	-1.181
	(-0.81)	(0.36)	(-1.37)	(0.35)	(0.49)	(-0.52)	(-1.00)	(-1.04)	(-0.69)	(-0.49)	(-0.01)	(-0.35)
Lag 1 of TFP Growth	0.245***	0.213***	0.210**	0.243**	0.186***	0.193***						
	(3.40)	(2.81)	(2.27)	(2.28)	(2.72)	(2.81)						
Lag 1 of Capital Stock Growth							0.965***	0.964***	0.938***	0.913***	0.993***	0.900***
							(6.78)	(7.08)	(8.82)	(4.98)	(7.86)	(6.88)
Lag 2 of Capital Stock Growth							-0.072	-0.077	-0.061	-0.037	-0.078	-0.100
							(-0.89)	(-0.94)	(-0.84)	(-0.38)	(-0.72)	(-1.18)
Bank Branches*Low Income Dummy		1.191						0.166				
		(0.36)						(0.18)				
Bank Branches*Middle Income Dummy		0.011						-0.109				
		(0.01)						(-0.44)				
Bank Branches*High Inflation Dummy			-0.130						-0.639			
			(-0.21)						(-1.18)			
Bank Branches*Middle Inflation Dummy			-0.423						-0.096			
			(-1.27)						(-0.41)			
Bank Branches*Low Institutional Quality Dummy				-1.123						0.397		
				(-0.55)						(0.52)		
Bank Branches*Medium Institutional Quality Dummy				-1.310						0.159		
				(-1.14)						(0.27)		
Bank Branches*Low Financial Depth					1.660						-0.001	
					(1.34)						(-0.00)	
Bank Branches*Medium Financial Depth					0.821**						0.115	
					(2.19)						(0.86)	
Bank Branches*CCA Dummy						-1.284						-0.509
						(-0.56)						(-0.40)
Bank Branches*MENAPOI Dummy						-2.173						-0.056
						(-1.03)						(-0.19)
Bank Branches*MENAPOX Dummy						1.271						1.297
						(0.38)						(1.15)
Observations	689	689	685	613	637	689	796	796	792	694	743	796
Number of clusters	100.000	100.000	100.000	89.000	99.000	100.000	117.000	117.000	117.000	102.000	116.000	117.000
Number of instruments	52.000	66.000	65.000	66.000	65.000	71.000	55.000	69.000	68.000	69.000	68.000	74.000
Hansen test p-value	0.390	0.290	0.554	0.454	0.729	0.722	0.429	0.290	0.067	0.627	0.714	0.256
A-B AR(1) test p-value	0.000	0.000	0.000	0.000	0.000	0.000	0.048	0.044	0.001	0.131	0.009	0.047
A-B AR(2) test p-value	0.506	0.600	0.698	0.451	0.469	0.720	0.945	0.922	0.148	0.884	0.067	0.828
Lowest number of observations included	2.000	2.000	2.000	2.000	1.000	2.000	1.000	1.000	1.000	1.000	1.000	1.000
Highest number of observations included	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Average number of observations included	6.890	6.890	6.850	6.888	6.434	6.890	6.803	6.803	6.769	6.804	6.405	6.803

Dummy variables for time periods were also included in each model. Results for these are not reported here.
t-statistics in parentheses based on cluster-robust standard errors
* p<0.1 ** p<0.05 *** p<0.01