Comments for

Conference on Capital Markets and Financial Integration in Europe,

organized by ECB - CFS, Vienna

14-15 November, 2005

Introduction

- The idea that a country's degree of financial development affects its long-term economic growth dates back to Goldsmith (1969), MacKinnon (1973) and Shaw (1973). A large literature has developed that identifies a positive link between financial sector and growth. The empirical research -- see, for example, Demirguc-Kunt and Maksimovic (1998), Jayaratne and Strahan (1996), Rajan and Zingales (1998), and Levine, Loayza, and Beck (2000) -- strongly supports the claim that countries with more developed financial structures such as banks, other financial intermediaries, stock markets tend to grow faster. However, they have been careful not to over-emphasize the existence of causality.

- Several influential papers have investigated the theoretical underpinnings for the finance-growth relation. Townsend (1983) considers an environment with alternative trading arrangements, and shows that more complex financial structures tend to be observed in high-income economies. Boyd and Prescott (1986) examine how financial intermediary coalitions may serve as an incentive-compatible mechanism for allocating resources to their most productive use under private information. Greenwood and Jovanovich (1990) study a model in which the extent of financial intermediation arises as part of the growth process, and in turn, affects it. In a related analysis, Bencivenga and Smith (1991) show how the existence of a competitive banking sector may alter the composition of saving to promote growth.

- The two papers that constitute the basis for my discussion extend the study of the finance-growth relation to transition or accession countries. In his review, Levine (1997) lists the role of financial intermediaries in the development process in terms of risk pooling and diversification, acquiring information about investments and the allocation of resources, and marshalling savings. However, as the papers under discussion indicate, new issues need to be considered when analyzing transition or accession countries. One of these issues is the role of ***macroeconomic instability*** while the other may be broadly defined as ***governance issues*** that help to align the incentives of borrowers with those of lenders of depositors.

The Finance-Growth Nexus and Financial Sector Environment: New Evidence from Southeast Europe by A. Mehl, C. Vespro, and A. Winkler

- The paper on provides an extended discussion of the financial environment in Southeastern Europe. The authors distinguish between four regimes that can be characterized by differences in quantitative versus qualitative features of the financial environment. Whereas such quantitative indicators as the monetisation to GDP ratio refer to the former, the existence of resource mis-allocation through lending by state-owned banks or through connected lending practices, the absence of credit and risk management, lax or insufficient supervisions of banks refers to the latter.

- The authors provide an extended discussion of the changes in the financial sectors of Southeastern European countries. This typically involves a move from a situation in which financial sectors possess depth but display poor environments to situations with dramatic declines in such quantitative indicators as monetisation to GDP ratios following the financial crises of the 1990's. More recently, financial sector reforms and the entry of foreign banks are associated with improvements in both quantitative and qualitative features of the financial environment, which in turn have led to credit booms and increases in financial market activity observed in many of the countries in question.

- Mehl, Vespro, and Winkler modify the approach pioneered by King and Levine to account for changes in quality as well as quantity of financial market activity in Southeastern Europe.
- They allow for such variables as EBRD indicators of structural reform or banking sector reform, indices of creditor rights, a rule of law rating, and indices for corporate and bankruptcy law.
- They also control for the presence of macroeconomic instability through the use of two threshold type inflation variables.
- Both the proxy variables for macroeconomic instability and the qualitative indicators have significant effects in the expected direction, suggesting that there are important channels for the transmission of financial market activity to growth.

Importance of Financial Sectors for Growth in Accession Countries" by

G. Fink, P. Haiss, and G. Vuksic

- The approach involves a explicit production function approach. Unlike other papers that use capital accumulation as an alternative dependent variable, the paper by Fink, Haiss, and Vuksic take changes in the physical capital stock as an explanatory variable together with labor and human capital.
- They also examine the impact of different measures of financial development on growth. Specifically, they consider two alternative measures of total financial intermediation, domestic credit, private credit, stock market capitalization and bonds outstanding. They use both panel data and cross-country regressions and consider the period 1996 to 2000 for 9 accession countries, including Turkey.
- Their results yield several interesting results. First, capital accumulation is found to be significant in all the regressions. Second, domestic credit but not private credit is found to have a significant effect on growth. Third, bond market activity but not stock market activity is found to contribute positively to growth.

Discussion

- The results from both papers indicate that the finance-growth relationship is more complex than predicted by the earlier literature. In particular, the results show that macroeconomic instability and corporate governance issues matter. The first paper shows that there are threshold effects of inflation: unless inflation is below some value, inflation has a negative effect on growth. It also shows that qualitative measures such as progress in structural reforms or better creditor rights have a positive effect on growth.

- It is possible to consider the ways in which macroeconomic instability and corporate governance issues may also interact. Some recent papers have shown that many emerging market economies are characterized by the presence of **business groups.** These are conglomerates that tend to function as internal capital markets.
- A number of authors has shown that while business groups may function to insure members of business groups against macroeconomic risks, they nevertheless do not perform well in terms of the allocation of investment funds to their most productive uses.
- Thus, macroeconomic instability may have a variety of effects. In the shorter run, inflation and inflation uncertainty may have a negative effect on growth by increasing the cost of capital and by creating an option value of waiting. In the longer run, especially in environments that are characterized by poor corporate governance structures, macroeconomic instability may have further detrimental effects on growth by affecting the allocation of capital through the structure of the corporate sector

- One of the important findings of the second paper is that capital accumulation has a positive effect on growth. A recent literature in growth and productivity which takes a production frontier approach decomposes productivity changes into changes in efficiency, technical progress, and capital accumulation. See, for example, Kumar and Russell, *AER* (2002) or Muados, Pastor, and Serrano, *Applied Economics* (2000).
- The first paper also examines convergence of per capita income levels, and shows that countries appear to be moving closer to the world production frontier or *catching-up*. However, catch-up (or efficiency improvements) has not contributed to convergence. They also find that technological progress appears to be non-neutral, with no improvement at very low capital-labor ratios, some improvement at moderate capital-labor ratios, and rapid expansion at high capital-labor ratios. Finally, they note that both growth and changes in the distribution of labor productivity appear to be driven primarily by capital deepening.

- These results may be compared with results in the second paper. In addition to attributing a positive role for capital accumulation, the paper finds that both domestic credit and lagged values of total financial intermediation have a positive effect on growth. Thus, to the extent that financial development may have effects on efficiency or total factor productivity, it can be seen to be contributing to growth in accession countries. Nevertheless, just as in the studies on world-wide productivity and convergence, capital deepening continues to play a significant role for accession countries.

- The results of the second paper are also noteworthy because they indicate that it is domestic credit – not private credit – which has a positive impact on growth. They note that this result can be explained by the presence of a large quantity of bad loans in the banking systems of transition or accession countries and by the fact that the banks of these countries most engaged in providing working capital to businesses.
- It is of interest to provide some evidence from Turkey in this regard. In a recent study on financial liberalization in Turkey (2003), Jenkins (2003) shows that liberalization of interest rates in an inflationary environment adversely affected bank lending behavior by changing the composition of bank lending portfolios towards short-term, low-risk uses. These include the funding of government bonds and Treasury bills, short-term working capital for domestic trade, and consumer credit. She also finds that the higher real interest rates and higher rates of default in the aftermath of the liberalization tended to reduce credit for credit-worthy consumers in sectors with a high inflation risk.

- One of the key problems in developing and transition countries has to do with identifying and funding investment projects in high growth potential sectors. Altuğ and Usman (2005) consider an environment in which ntermediated finance, i.e., mainly bank finance, is the dominant form and the high growth potential sectors are likely to exhibit spillover or threshold effects: their potential will materialize only if the sector can attract a sufficiently large amount of capital. For most developing and transition economies, this critical minimum amount of funding is likely to be beyond the means of any single bank.
- Altuğ and Usman draw attention to the fact that, in many cases, banks assume that role in highly imperfectly competitive environments. See, for exmple, Fry (1995, p. 302) In such an environment, Altuğ and Usman show that there exists an under-lending equilibrium in which the productive project does not get financed even it is *ex post* feasible and may be the ***only*** equilibrium if the governance system is underdeveloped.

Selected References

- Altuğ, S. and A. Filiztekin (2005). *The Turkish Economy: The Real Economy, Corporate Governance and Reform,* Forthcoming, RoutledgeCurzon Studies in Middle Eastern Economics, Routledge Press.
- Altuğ, S. and M. Usman (2005). “Bank Lending with Imperfect Competition and Spill-over Effects,” Manuscript.
- Jenkins, H. (2003) “Financial Liberalization and Bank Lending Behavior in Turkey,” Manuscript, International Institute for Advanced Studies, Cambridge, Mass.