

1 Growth and financial markets

What do financial markets do?

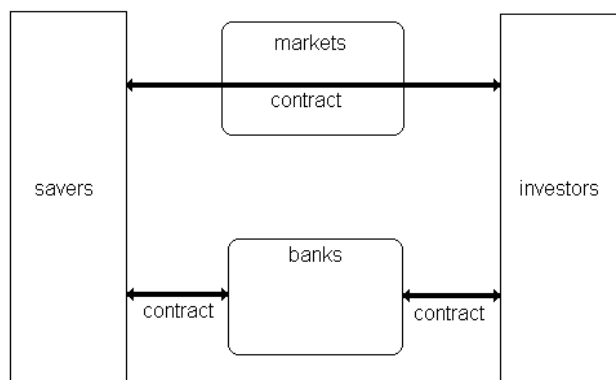
- Produce information ex ante about possible investments
 - so as to help people allocate capital
- Monitor investments
 - exert corporate governance after providing finance
 - see that firms fulfill promises
- Facilitate trading, diversification, and management of risk
- Help generate and pool savings
 - so that large projects can be undertaken
- Help the exchange of goods and service (the payments mechanism)
- Provide liquidity

Financial markets

- Markets connect savers and investors (those with investment projects)
 - they do not take on risk by themselves (except for a couple of days, perhaps)
 - they provide access to information for savers on investment opportunities
 - they provide advice to savers (and investors)
 - they provide liquidity for owners of assets who need cash
 - savers must monitor their own investments
 - diversification can be difficult for small savers
 - * although mutual funds can provide this service
 - Financial markets require sophisticated court systems to protect them
 - * legal requirements more complicated
 - * contracts are intertemporal
 - * however regulation is normally less (against fraud, for example)

Financial intermediaries

- Financial intermediaries (like banks) borrow from savers and lend to investors



- they take on risk on the investment side (diversified)
- they do delegated monitoring
 - * decide what investments to make
 - * monitor the development of the investments
 - * against moral hazard or adverse selection
- provide diversification of investments for savers
- owners of banks put up capital
 - * helps reduce risk the banks are willing to take on
 - * helps protect savers if large fraction of investments fail
- provide liquidity to savers who need cash (deposit withdrawals)
- savers monitor the banks
- usually require less complicated court systems
- use private information on the investors

Financial intermediaries and financial markets

.What kinds of financial systems exist where

- Banks predominate where and when
 - Firms are relatively small (all firms in Argentina are small)
 - Information is difficult or expensive to acquire
 - * so the personal information of the banker matters (relationships)
 - * the information acquired by the payments side of banking matters
 - Court system is not transparent
 - Where demand for transactions is important

- Where savers are relatively uninformed
- Markets predominate where and when
 - Firms are large
 - So they naturally collect the information needed by markets
 - Sufficient large savers exist to be able to diversify personally
 - In economies that are larger (comment on Barbados)
 - Court system resolves problems quickly and in a transparent way

Markets and intermediaries co-exist in many countries

- In developed countries
 - markets have been dominant in Anglo-Saxon countries (although banks are important)
 - banks have been dominant in the rest (especially Germany and Japan)
 - Markets have grown dramatically in the last 50 years (in all developed countries)
 - * both stock and bond markets
 - * capitalization of stock markets is near or above GDP
 - * Private bond markets important for large firms
- In developing countries
 - Banks dominate (although small markets exist)
 - Banks are still relatively small (Argentina: deposits \sim 20% of GDP)
 - Relationships matter
 - * good: this is the information about borrowers
 - * can lead to misuse (loans to friends)
 - Public banks can be very important (and problematic)

What does theory suggest about the relationship between growth and markets

- from growth to markets: economic growth should lead to greater use of markets
 - as firms become larger: they collect internally the information they need to use markets
 - markets offer lower intermediation costs (so savers get more, investors pay less)
 - economic growth is correlated with better institutions (including courts)

- agents have more incentives to spend resources collecting information
- more agents willing to participate in risk diversification
 - * more savings is available: some can go to risky projects
 - * large risky projects are relatively smaller (this goes two ways)
- as markets become larger, they tend to become more liquid
- increased use of financial intermediaries for transactions (smaller informal economy)

What does theory suggest about the relationship between growth and markets

- from markets to growth: better markets should lead to more growth
 - more efficient allocation of investment (from market information)
 - better monitoring of firm managers (with takeover potential)
 - Large projects can be financed easier and cheaper
 - more people willing and able to share risks (so better sharing of risk)
 - smaller firms with good projects can get financing
 - better markets means more savers (in banks) and more funds available for investment
 - Possibly: better financing of accumulation of human capital

Banks and growth

- Banks can have significant leverage for controlling firms
 - they can have representatives on board of directors in many countries
 - they can put pressure on management (although relationships can be complicated)
- Banks are efficient collectors of information on firms
 - since they process the payments side, they have information about incomes and expenditures
 - they can use this information in a monopolistic way
 - * this can benefit new firms as the banks collect information (they give discounts)
 - * later when they have private information, they charge higher interest rates
 - reduce the duplication of information collection

Banks and growth (2)

- Banks can effectively monitor the firms (this solves a free rider problem in markets)
- May be a balance against concentrated ownership of firms (countervailing power)
- Effect in economies where firms want information to stay private
 - because of fear of government pillaging, corruption, or criminals

Markets and growth

- Markets can weaken (and complement) power of banks
 - although getting a bank loan usually improves the price of your stock
- Markets tend to be willing to take more risks with new technologies
 - bankers tend to be conservative with respect to technology (they understand old ones)
 - markets lets venture capitalists make quick profits (if successful)
 - In fact: this is the object of venture capitalists
- Markets may respond better in downturns (where banks may try to save companies)
- If power is concentrated in banks, markets can soften this effect
 - problem of loans to related parties

Empirical evidence about financial markets and growth

- Problem of measuring financial market development
 - is it size of financial markets and banks
 - is it liquidity
 - (problem of what causes what: could be weak legal systems)
- Goldsmith (1969) 35 countries, from 1869 to 1963
 - measured size of financial system (as fraction of output)
 - a result: strong positive correlation of relative size of financial system and level of economic activity

Empirical evidence about financial markets and growth (2)

- King and Levine (1993) 77 countries, from 1960 to 89
 - tried to control for other factors

- Three definitions of financial development
 - * liquid assets in the financial system / output
 - * bank credits / output
 - * total private credit / output
- Three definitions of growth
 - * average real per capita output growth
 - * average per capital capital stock growth
 - * total factor productivity growth (Solow residual)
- Averages of each of the first three over the period are strongly positively correlated with averages over the period of each of the second three
- Values of the first three in 1960 are strongly positively correlated with the average of the second three over the period

Empirical evidence about financial markets and growth (3)

- La Porta et al (2001)
- Study degree of public ownership of banks
- The show that
 - higher levels of public ownership is associated with lower levels of bank development
 - higher levels of public ownership is associated with slower economic growth

Empirical evidence about financial markets and growth (4)

- Levine and Zervos (1998) 42 countries from 1976 to 1993
- Use a measure of liquidity in the financial markets
 - use turnover /capitalization
 - this ranged from .5 in USA to .06 (or less) in Bangladesh, Chile, Egypt
- Initial liquidity and initial level of bank credit are strongly positively correlated with
 - economic growth
 - capital accumulation
 - productivity growth

Empirical evidence about financial markets and growth (5)

- Does it matter where the financial market is (where your firms do business)
- With the increase in international financial transactions, it might not
- For Italy: not just national level matters
- Guiso, Sapienza, Zingales (2002) find that local (regional) financial conditions matter for economic success for firms and of an area