Finance, Growth & Opportunity

Implications for policy

Today, I will make three points

1) Finance matters for human welfare—beyond crises.

2) Financial innovation is associated with—arguably ***necessary*** for—sustained improvements in welfare.

3) Policy often ignore the implications of these views

Finance is powerful

But, is finance good or bad?

- “... banks have done more harm to the morality, tranquillity, and even wealth of this nation than they have done or ever will do good.” John Adams
- “ … banks are the happiest engines that ever were invented for creating economic growth.” Alexander Hamilton

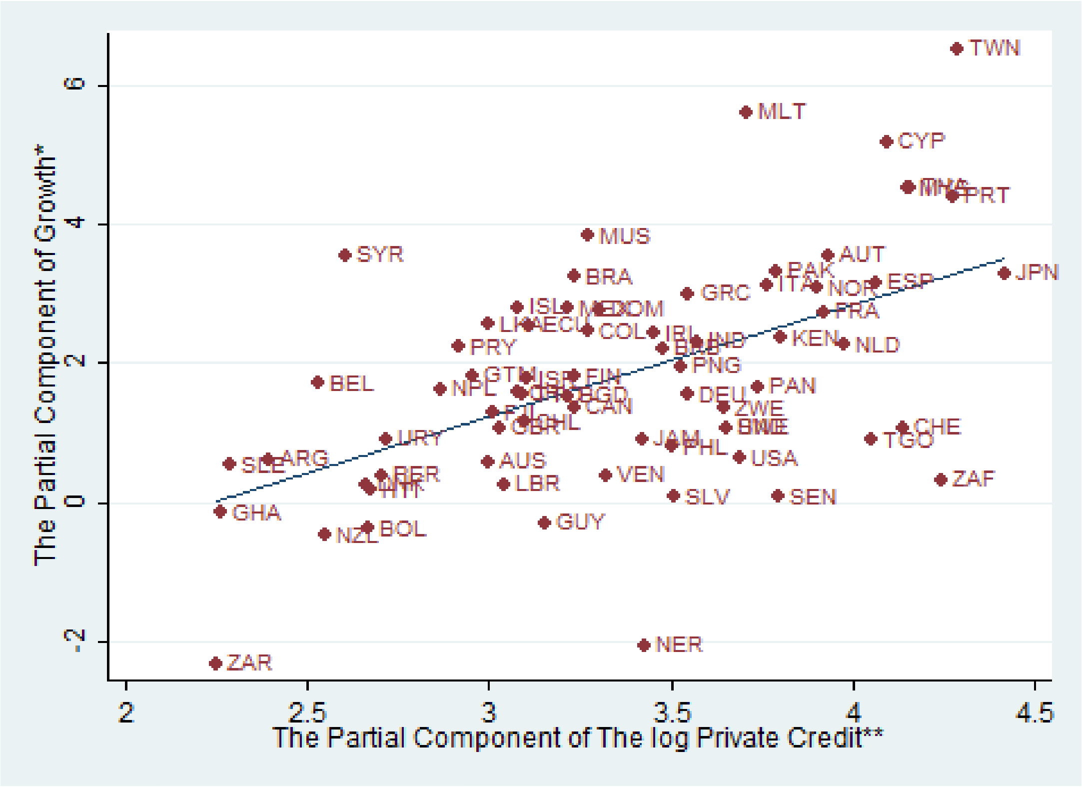
Of course, it depends

- Does it identify and fund the best projects—regardless of family wealth and connections
- Does it limit credit—and hence opportunity—to a few?

Some data …

Cross-country and cross-state evidence

Finance and growth

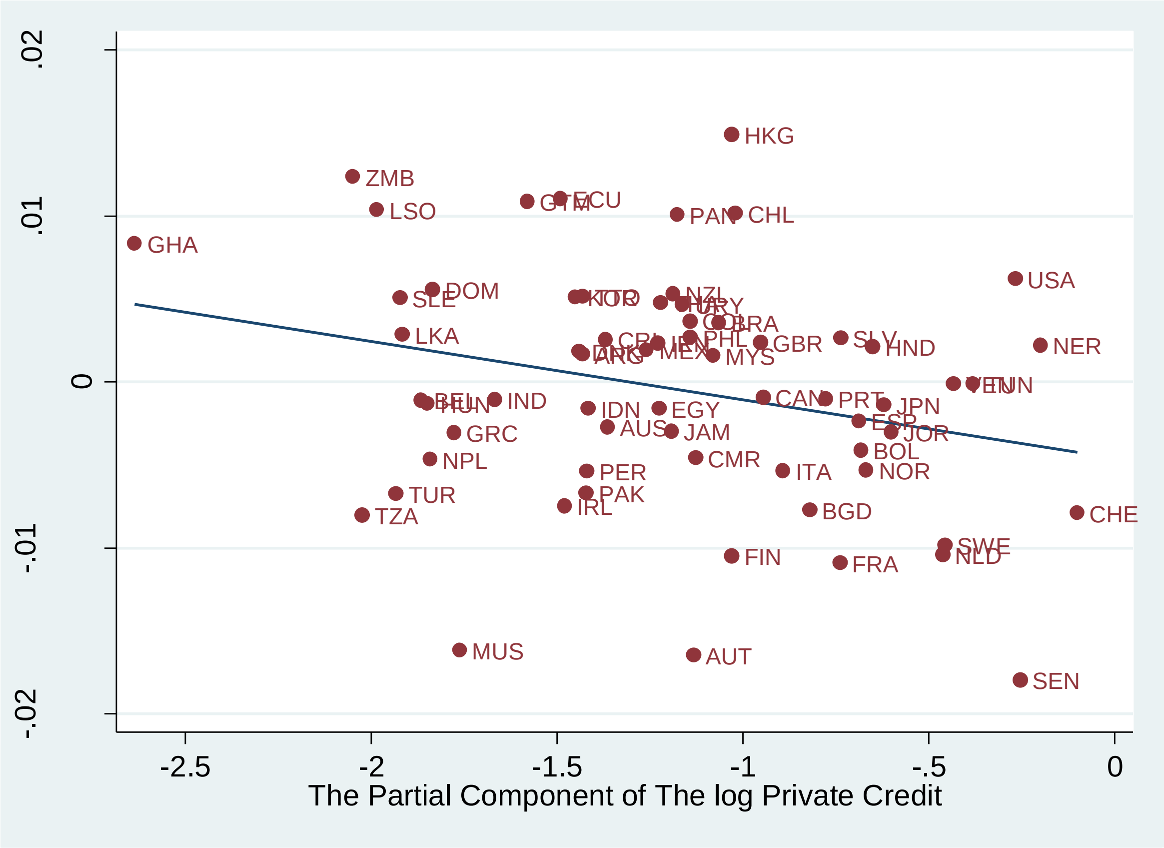


Notes: This is a partial scatter plot of the regression:

$$Growth = \beta_0 + \beta_1 Log(Private\ Credit) + \beta_2 X + \varepsilon,$$

where *Growth* is average real GDP per capita growth over the 1960 to 2005 period

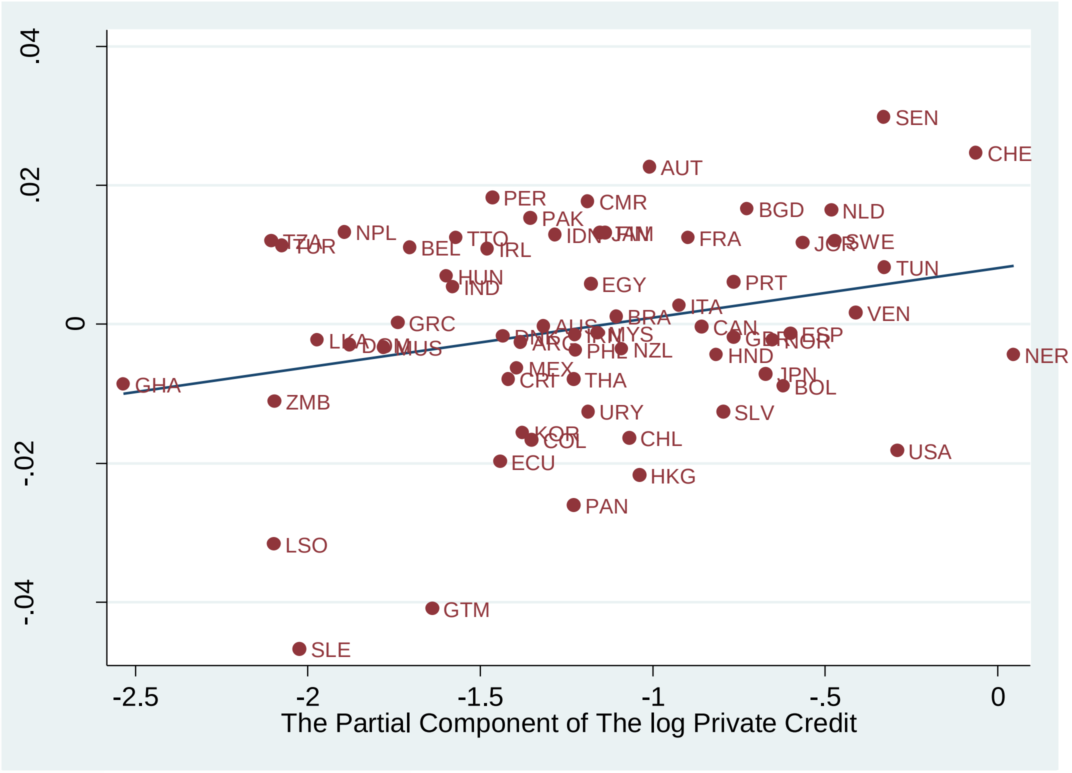
Finance and inequality



Notes: This is a partial scatter plot of the regression for the 1960-2005 period:

$$Growth\ in\ the\ Gini\ Coefficient = \beta_0 + \beta_1 Log(Private\ Credit) + \beta_2 X + \varepsilon.$$

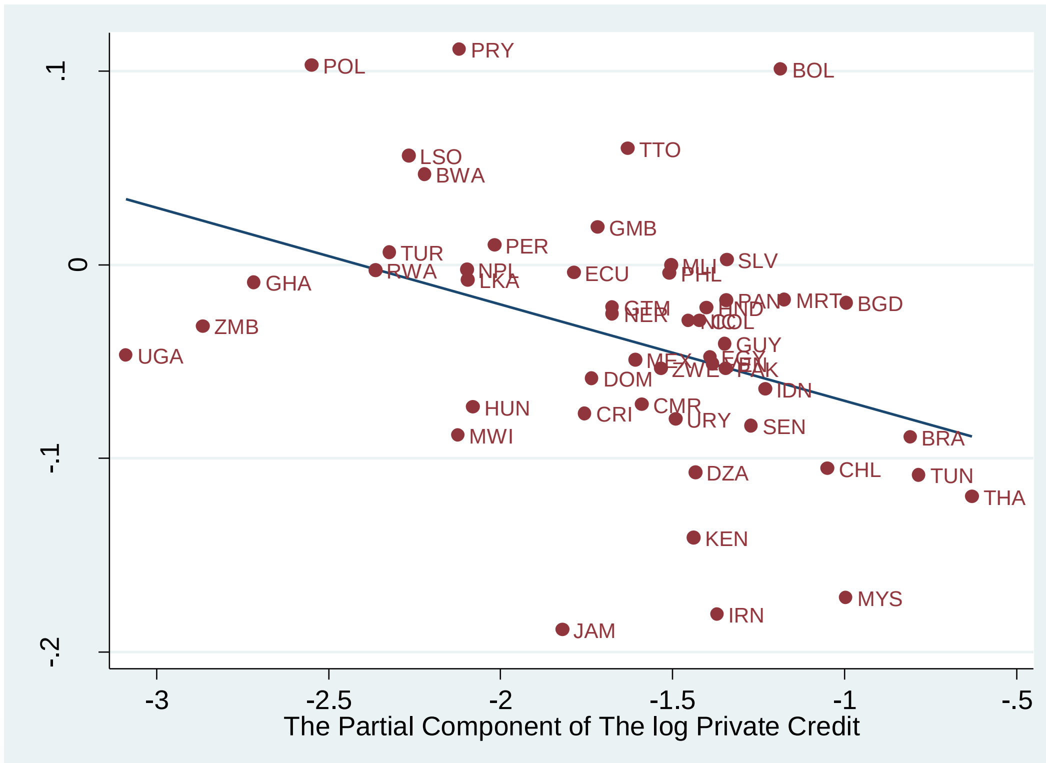
Finance and the poor



Notes: This is a partial scatter plot of the regression over the 1960-2005 period:

$$Growth\ in\ the\ Lowest\ Income\ = \beta_0 + \beta_1 Log(Private\ Credit) + \beta_2 X + \varepsilon.$$

Finance and poverty

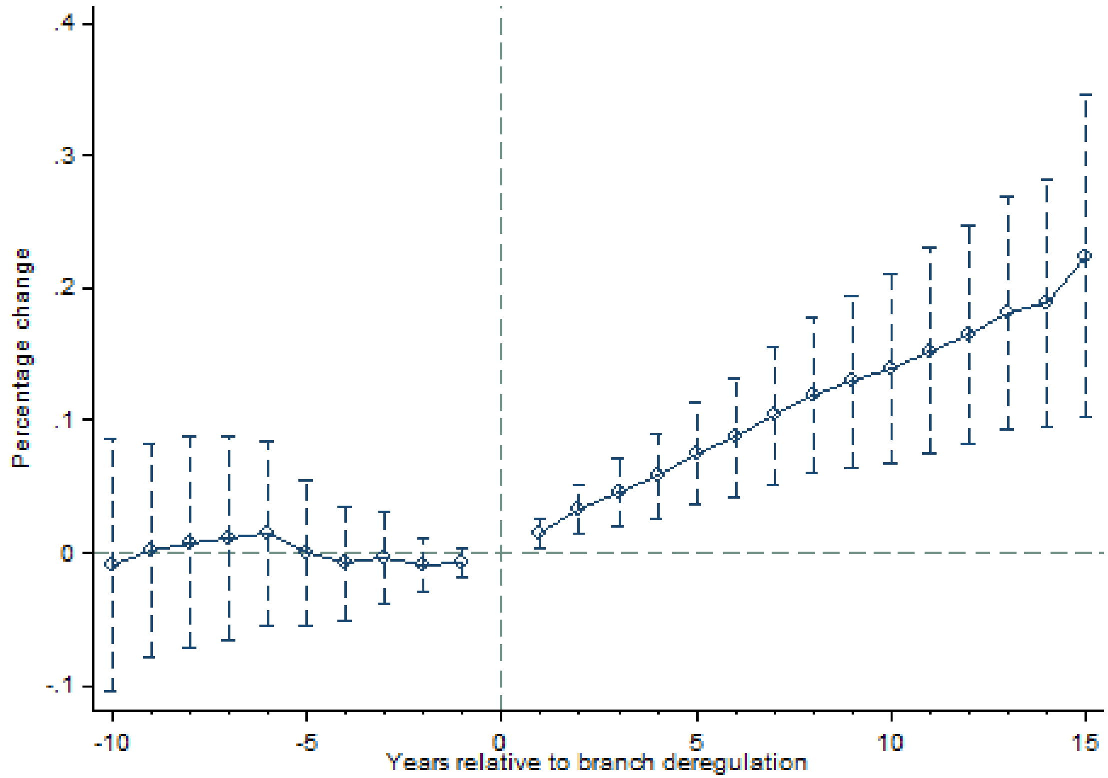


Notes: This is a partial scatter plot of the regression over the period 1980-2000:

$$Growth\ in\ Headcount = \beta_0 + \beta_1 Log(Private\ Credit) + \beta_2 X + \varepsilon,$$

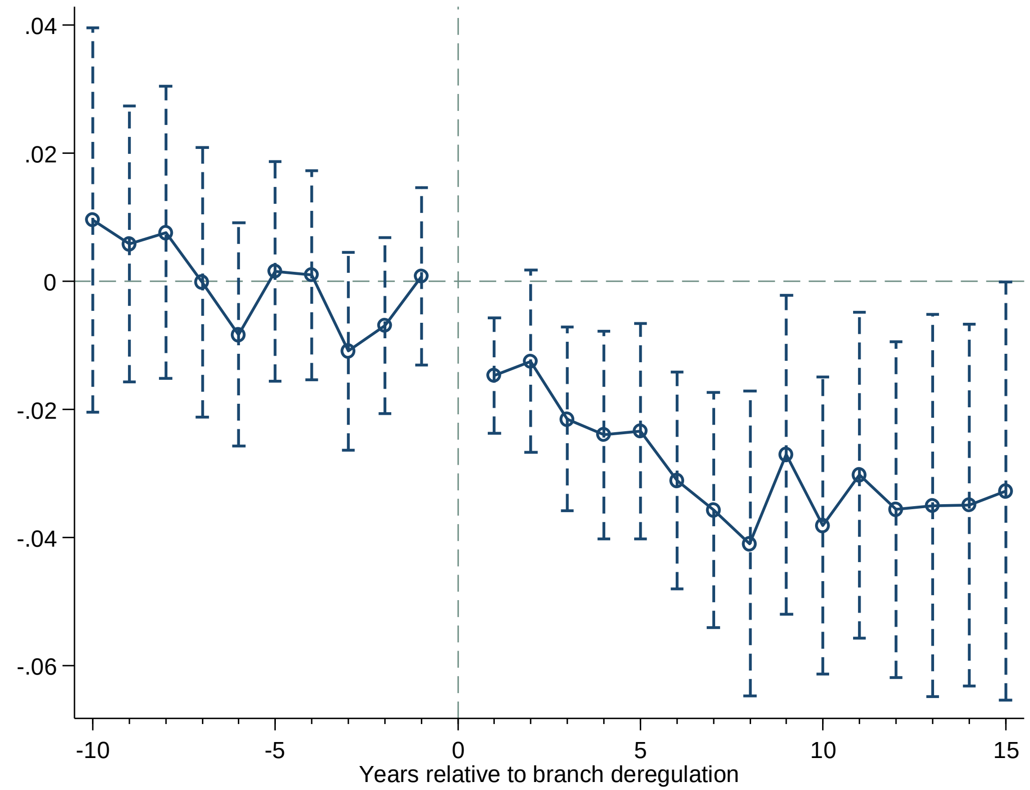
where *Growth in Headcount* is the growth rate of the percentage of the population living below $2 dollar per day.

Finance and growth: U.S. States



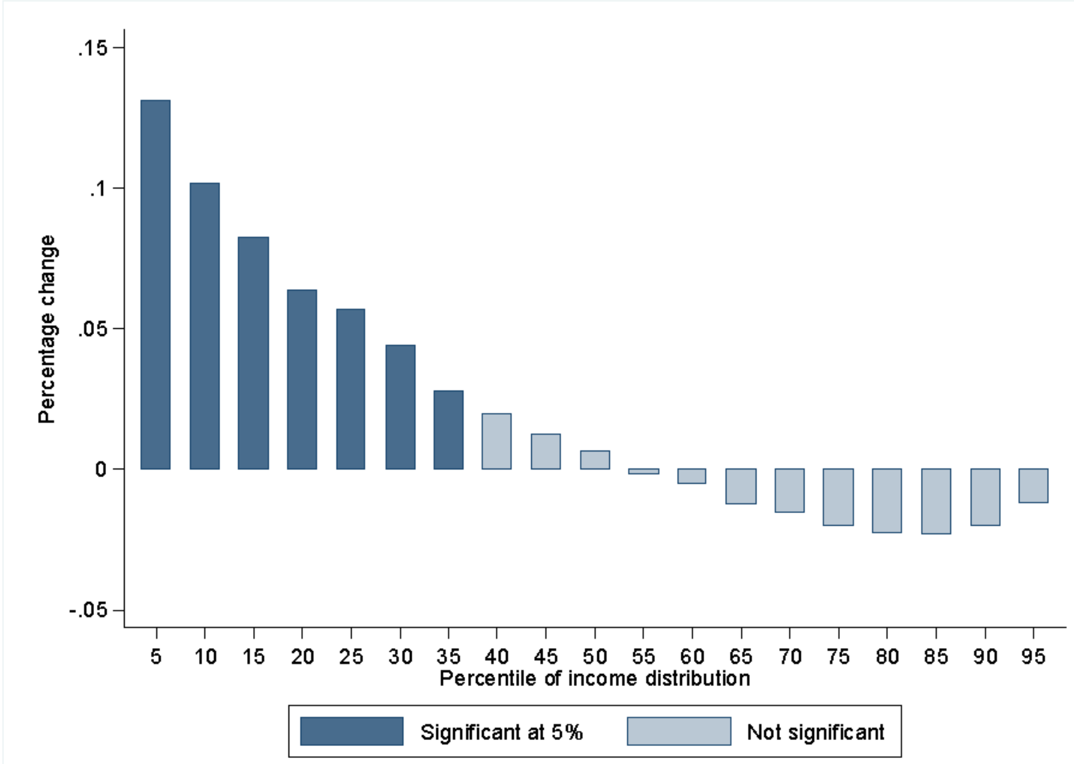
$$\log(GSP)_{st} = \alpha + \beta_1 D^{-10}_{st} + \beta_2 D^{-9}_{st} + \ldots + \beta_{25} D^{+15}_{st} + \mathbf{A}_s + \mathbf{B}_t + \varepsilon_{st}$$

Finance & income inequality: U.S. States



$$\log(\text{Gini})_{st} = \alpha + \beta_1 D^{-10}_{st} + \beta_2 D^{-9}_{st} + \ldots + \beta_{25} D^{+15}_{st} + \mathbf{A}_s + \mathbf{B}_t + \varepsilon_{st}.$$

Finance & income distribution: U.S. States

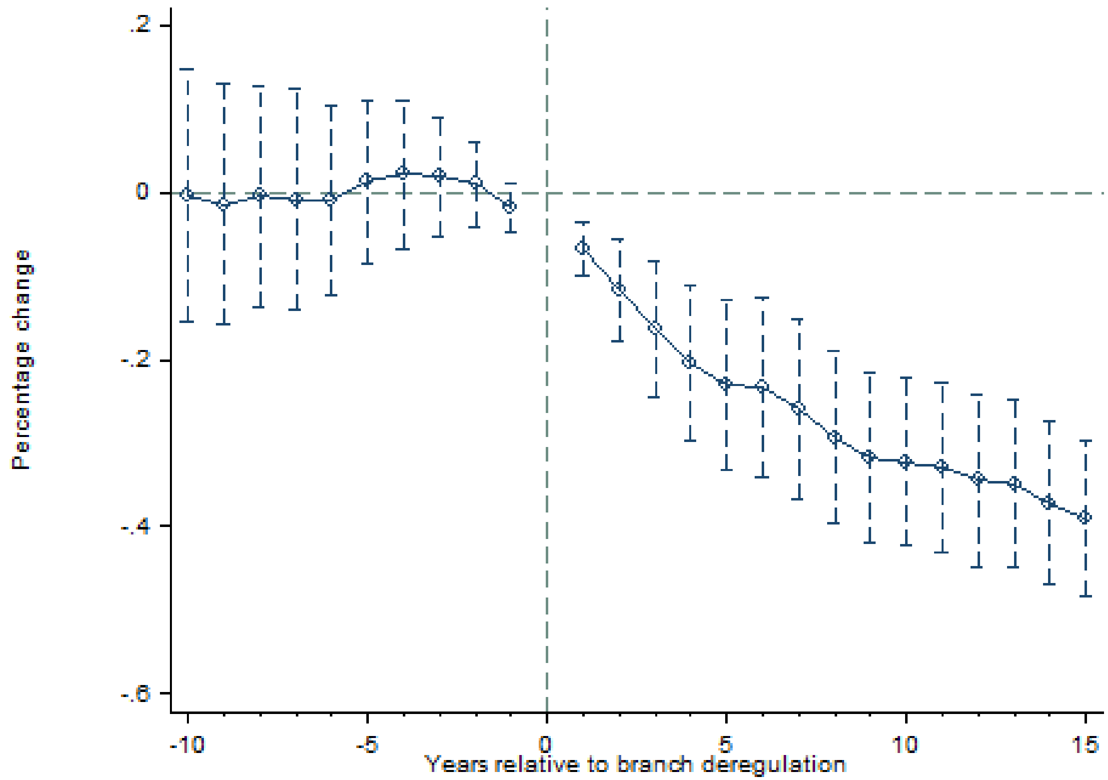


This reports the estimates of γ from 19 separate regressions of the following form:

$$Y(i)_{st} = \alpha + \gamma D_{st} + A_s + B_t + \varepsilon_{st}$$

where $\mathrm{Y(i)}_{st}$ is the logarithm of *i*th percentile of income distribution in state *s* and year *t*.

Finance & unemployment: U.S. States



$$\log(\text{Unemployment})_{st} = \alpha + \beta_1 D^{-10}_{st} + \beta_2 D^{-9}_{st} + \ldots + \beta_{25} D^{+15}_{st} + \mathbf{A}_s + \mathbf{B}_t + \varepsilon_{st}.$$

Finance matters beyond crises

- Finance influences:
  - Growth
  - income distribution, poverty, unemployment
  - Other work: entrepreneurship, education, racial discrimination, etc.
- Finance shapes the contours of each person’s economic horizons.

Policy implications

- By shaping opportunities, finance generates winners & losers → powerful political reactions.
  - For example, U.S. in the 1970s – 1990s
  - For example, U.S. now
  - For example, all countries at all times
- Often the powerful do not want sound finance
- Many consequential regulatory defects reflect politics, NOT technical ignorance.

What about financial innovation?

Does finance facilitate creative destruction?
Or, destructive creations?

Both …

- Financial innovation can both foster creative destruction and it can be a source of destruction.
- I will, however, propose the following …

Financial innovation is *necessary* for prosperity

- The parallels with medical research are apt.
- Not all innovations are economically beneficial to social welfare.
- But, people will not enjoy sustained improvements to welfare without innovation.

There are many examples …

- Oceanic explorations and modifications of business
  - from from partnerships to the *commenda*, and
  - from limited partnerships, to the joint stock company

There are more examples

- Initially, railways funded through local private equity since prominent local investors could monitor
- Reliance on local finance restricted growth.
- Problem → profit opportunity …

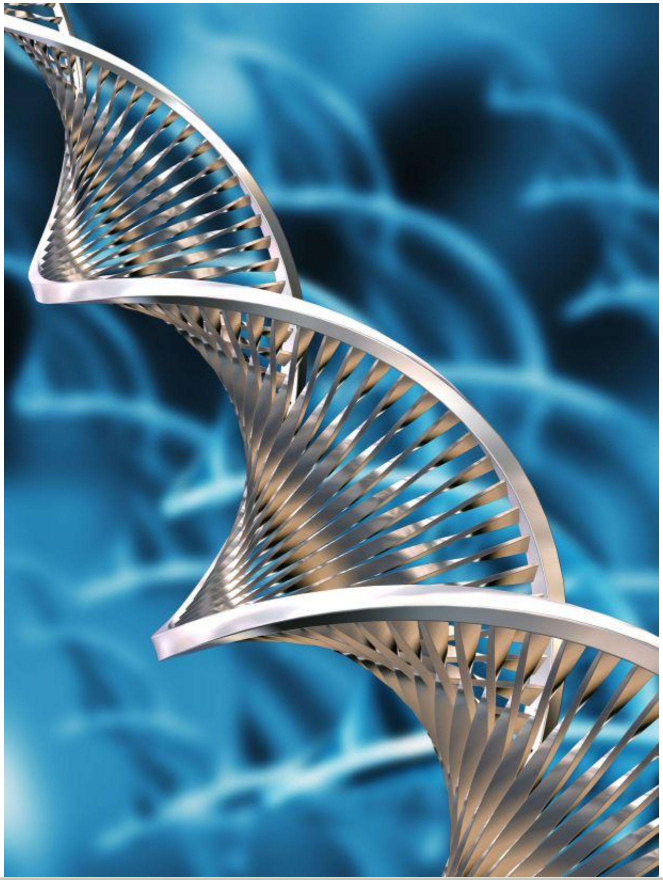
Financial innovation was necessary for railroad expansion and improvements

- Specialized investment banks emerge to screen /monitor
- New financial and accounting reports help screening
  - Price, cost, repair, volume information available monthly
  - Then daily and hourly by the

More recently…

- From IT and venture capitalism to …

- … to bio-technologies & ?



On financial innovation

- Technological change
  - is ***the*** major source of economic growth, including in developing economies
  - often requires finance to adapt, evolve, and innovative.
- Political, legal, & regulatory impediments to financial innovation can might thwart growth.
- Inflexible regulations systems can also causes crises, e.g., CDS and bank capital in the US.

Policy messages

- The policy challenge is more difficult than finding the right checklist of policies for two reasons:

1) Policies must adapt and change as countries develop—it is necessarily a dynamic process.

2) Even if we find the right checklist, politics is (arguably) a bigger impediment than technocratic expertise to creating a sound financial policy environment.