# Intro. and background
# 266: Financial Markets and Institutions

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http://e105.org/e266

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- **Business:**
  - Jon Faust
  - TA: Burak Olmez
  - Learning Den: Jonathan Schwarcz
- **Waitlist**
  - Some may get in
  - I'll be emailing; seems like it will be just a couple at most.
- **Course website:**
  - http://e105.org/e266
  - has everything.

    Office hours, syllabus, exams, grading, etc.
- **Quick summary of grading**
  - 2 mid-terms and a final
  - 2 problem sets

    prob. sets have different object than the exams
- **A word about book and syllabus**
  - For each day, there are readings from the book

- Also list key terms and which chapter summary points, problems, and quantitative problems are most relevant.
- Together with my lecture notes, those will be a good study guide.

▶ **Lectures vs. the book**

- My goal is to add substance
- Use the book to fill in definitions, facts, background

▶ **Office hours**

- Mine will be in Daily Grind (Brody Center)
- You can also schedule a meeting in my office if that works better.

▶ **Finally, the newspaper**

▶ **Down to work**

▶ **Basics**

- Under certain conditions, markets deliver good outcomes.

  I'll call these the 'perfect markets' conditions and outcomes. You should know these, but we'll review them.
- Those conditions are not met in financial markets and financial markets generally work very poorly.
- And when financial markets work poorly, so do most other markets.

  Without healthy financial markets and institutions, economies founder and/or stagnate.
- Thus, all economies have evolved an elaborate web of private and public sector institutions and practices to help get the economy closer to those perfect market outcomes.
- This elaborate web is often very messy.
- While the world seems to have made immense progress overcoming the problems with financial markets, the web remains very imperfect.
- One symptom of this is that tragic financial crises and/or collapses remain regular occurrences.

▶ **The class will explore**

- Why are financial markets so important?
- What are key aspects of modern financial markets and institions around the world? In what ways do they work well and badly.

- What economic principles drive both the problems and the evolving solutions we see?

▶ **The principles in action historically**

▶ **Real wages, 1200 to the present**

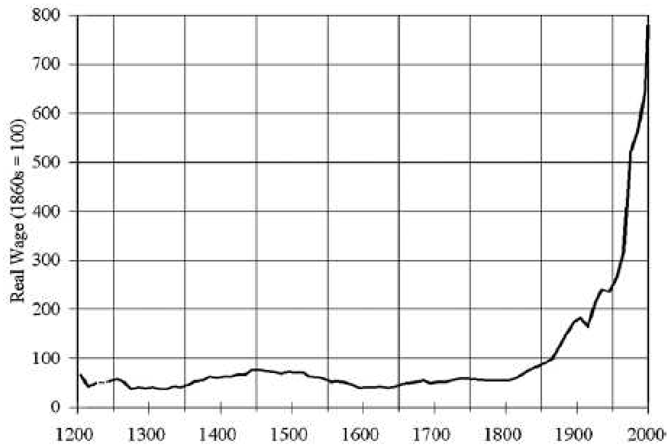



FIG. 1.—Builders' real day wages, 1209–2004 (source: table A2)

Cite: Gregory Clark, The condition of the working class in England, 1209-2004,Journal of Political Economy, v.113,n6, p1308.

▶ **hmmm.**

- From 1200 to about 1850, real wages went up and down a bit
- But real wages showed no secular upward move.

  Pick any two times at random over this period, and there is little reason to expect that real wages were higher for workers in the more modern of the two times.

- That changed around 1850.
- Q: What was different in the 1800s than before?
- A: Well, lots of stuff, but the 'second industrial revolution' was almost surely key
- And a simultaneous finance revolution was almost certainly essential as well.

▶ **Walter Bagehot explains**

- Great sage of finance; wrote in late 1800s. Victorian England.
- Famous book: Lombard Street.

  note:London's Lombard Street was the world's first 'Wall Street'

- Bagehot:

  A citizen of London in Queen Elizabeth's time . . . would have thought that it was of no use inventing railways. . . , for you would not have been able to collect the capital with which to make them. (Lombard Street)

- Bagehot again:

  A place like Lombard Street [London's Wall Street], where in all but the rarest times money can be always obtained upon good security or upon decent prospects of probable gain, is a luxury which no country has ever enjoyed. (Lombard Street)

- No financing, no incentive have big ideas, no progress

▶ **So why couldn't you get a loan in Elizabethan England?**

▶ **Elizabethan England**

- When was Elizabethan England?
- Roughly: 1560–1600

  . . . age of Shakespeare

▶ **Prevailing wisdom, Elizabethan England**

- Polonius: Neither a borrower nor a lender be.

  (Hamlet, Act 1, scene 3)

▶ **Remarkable**

- 1600: Never borrow, Never lend

  and the economy stagnates

- 1870: It's great that anybody with a good idea gets a loan.

  and the economy booms.

▶ **So what happened?**

- Elizabethan financial markets and institutions were highly problematic
- To see the details, we need to define two main flavors of business finance

▶ **Two flavors of business financing**

- Debt-like contracts: the person receiving funds today makes an unconditional promise to deliver certain fixed payaments at a fixed date in the future.
- Equity-like: the person getting funds makes a promise to give the fund provider a share of the profits, whatever they may be

▶ **Aside:: To be clear**

- Debt: promise of fixed payments;

- Equity: no promise of fixed payment.

  Promise a share of pie with no commitment about how big that pie might be or whether there will actually be a pie!

- Note: there have always been various hybrids of debt and equity, but the key distinction remains central today.

▶ **Elizabethan thinking on debt**

- Shakespeare's Polonius explains:

  Neither a borrower nor a lender be;
  For loan oft loses both itself and friend,
  And borrowing dulls the edge of husbandry.

▶ **What's up with this mention of friends?**

- Shakespeare presumes you would only lend to a friend.
- Why? Shakespeare's character knew that repayment depends on future intentions of the borrower. Nobody would lend to strangers.
- Later we'll develop a particluar version of this labelled 'adverse selection'
- If every loan had to come within a close circle of friends, it was pretty hard to finance, a railroad.

▶ **. . . dulls the edge. . .**

- Q: What does 'borrowing dulls the edge of husbandry' mean?
- Husbandry is 'wise use of resources'
- The idea is that borrowers are playing with other people's money and will tend to goof off with it more than they would with their own money.

  We call this 'moral hazard.'

▶ **Paraphrase Shakespeare: Due to moral hazard and adverse selection problems, nobody should participate in the market for loans.**

▶ **Legal institutions**

- Shakespeare's views were also reflected in how the legal system had evolved to that point.

▶ **William Blackstone**

- Blackstone was one of the great legal theorists and provided the main underpinnings of the English and American common law systems.

▶ **Blackstone on deadbeat borrowers**

- –

  > If persons . . . run in debt without the power of payment, they must take the consequences of their own indiscretion, even though they meet with sudden accidents that may reduce their fortunes. . . He cannot therefore murmur, if he suffers the punishment which he has voluntarily drawn upon himself.

▶ **What's this 'punishment' you speak of?**

- Folks who didn't repay were sentenced to debtors prison
- Unlike regular prison, in debtors prison, prisoner's had to pay for their own food and upkeep

  > Hmmm, that sounds bad!

▶ **Yep, that's bad**

- Parliamentary Commission into debtors prisons, 1729

  > a Day seldom passed without a Death, and upon the advancing of the Spring, not less than Eight or Ten usually died every twenty-four hours. . .

- You can read Charles Dickens's novel Little Dorrit for a more gripping account of this.

  > Or check out the BBC adaptation (7 Emmys!) go
  >
  > https://www.youtube.com/watch?v=oDL7bMn5XG4

▶ **Why'd they set up these institutions?**

- Debt laws were set up in order to bring to exert maximum pressure on debtors to repay.
- And to extort payment from any friends or family that took pity on the debtor
- You can see where these legal institutions might lead to Shakepeare's stark advice.
- And you can also see Bagehot's point that folks might not bother having big ideas because getting the capital to act on them was highly problematic

▶ **Aside:: Legal systems matter**

- The English common law system and the French/Spanish/Portugese civil law systems spread throughout the world.
- There is an ongoing debate about whether ending up with one or the other system strongly affected subsequent growth

Google `legal origin and economic growth`

- This debate goes beyond the simpler points I'm making here.

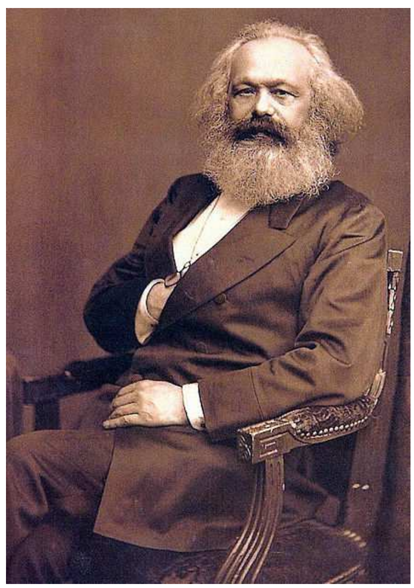
▶ **Equity finance**

- Equity finance involves no promise of fixed payments: equity holders just get their share of the pie,
- Thus, in principle, we avoid the problem of what to do when promised payments are missed.
- But Adam Smith (the guy with invisible hands) and his contemporaries believed that 'husbandry' problems would doom equity finance as well.

▶ **Separation of ownership and management**

- The key is that we have separated who gets the profits of the firm (the equity owners) from who runs the firm and does the hard work (the managers and workers).
- According to Smith, the managers and workers are sure to screw off

▶ **Adam Smith**



▶ **Just kidding, that's Karl Marx. . . just checking if you are paying attention.**

▶ **Adam Smith, Wealth of Nations**

- In the Wealth of Nations, Smith argued that equity finance was a hopeless way to run a company.

> [B]eing the managers rather of other people's money than of their own, it cannot well be expected that they [managers working for equity owners] should watch over it with the same anxious vigilance with which the partners in a private copartnery frequently watch over their own. ...

- He continues:

  > Negligence and profusion, therefore, must always prevail, more or less, in the management of the affairs of such a company.

▶ **What if the owners monitor the managers?**

- One fix for this would be if the equity owners kept a close eye on things,
- Sadly, the equity owners are lazy dogs as well:

  > Smith again: In a private copartnery, each partner is bound for the debts contracted by the company, to the whole extent of his fortune. In a joint-stock company, on the contrary, each partner is bound only to the extent of his share.

- thus:

  > [T]he greater part of these proprietors [the share owners] seldom pretend to understand any thing of the business of the company.

▶ **The world according to Smith**

- Everybody is lazy and irresponsible
- If the shareholders are not forced to focus on the firm by the fear of debtors prison, they won't pay attention.
- And if the shareholders don't pay attention, the managers will screw off.

  (By the way, don't even get Smith started on the workers)

▶ **Bottom line**

- Prevailing wisdom was that few equity-financed firms could ever succeed.
- Institutions of the day severely limited equity finance
- And where equity finance did exist, each shareowner was generally personally responsible for all debts of the firm

  Indeed, in some cases equity owners were liable for the full debts of the firm for up to 3 years after they sold their shares.

▶ **Financial markets and institutions**

- Both debt and equity were very scary endeavors under these institutions.
- These institutions were not random and foolish, they had evolved over centuries along with the other political institutions of the day.

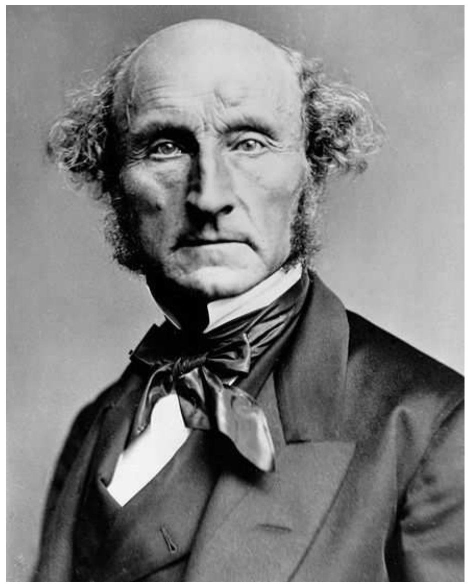
- They were based in a particular view of the intractability of asymmetric information problems.

▶ **What changed? Enter J.S. Mill**

▶ **J.S. Mill, 1800s**

- J.S. Mill was a famous economist and political philosopher

  Note: *On liberty* is short, clear book that's worth a read. In my view, much that's right, much that's wrong, but a provocative and influential set of ideas



- Mill had no rosier view of human character than Smith

  Mill wrote of the 'universal neglect by domestic servants of their employer's interests'

- But he argued that Smith exaggerated the intractability of this laziness problem

  Mill: 'one of those over-statements of a true principle, often met with in Adam Smith'

▶ **More balanced view**

- Equity finance was problematic for exactly the reasons Smith laid out.
- But the alternative was that basically only rich people could finance their good ideas

  Anybody else had little incentive even to have ideas like creating a railroad.

- And let's face it, capacity for good ideas doesn't fall only (or mainly) on the rich
- As Mill put it, we love it if every person running a project were motivated by full liability, but then we may not take advantage of the best minds:

  The stimulus of individual interest is some security for exertion, but exertion is of little avail if the intelligence exerted is of an inferior order...

- Translation: under Smith's system, lots of talent is left on the sidelines
- Mill's idea was to evolve institutions and practices that tended to mitigate the Shakespeare/Blackstone/Smith problems in order to take advantage of a broader talent pool.
- For example, write contracts that shape the incentives of managers
- Mill:

  it is not a necessary consequence of joint stock management, that the persons employed, whether in superior or in subordinate offices, should be paid wholly by fixed salaries. There are modes of connecting more or less intimately the interest of the employees with the pecuniary success of the concern.

- Bright idea: incentive pay!

  Won't solve the problems, but will mitigate them.

- Mill also argued for strong, transparent public accounting standards
- These would make it less of a hassle for those lazy share owners to monitor the firm

▶ **And so the 1800s saw...**

- The end of debtors prison in England

  disappeared many other places later

- The emergence of fairly modern limited liability laws for equity owners

  If the firm goes under, equity owners lost only what they invested.

- Limited liability laws often viewed as a key to the industrial revolution.

  Nice summary article in the Economist (url coming) go

  http://www.economist.com/businessfinance/displaystory.cfm?story%5Fid=347323

- And we also got the beginnings of modern accounting law/practices and corporate transparency

▶ **And, of course,**

- We also got the second industrial revolution taking off in the U.K. and wages began a rapid ascent that has continued through today

▶ **Aside:: A return to stagnation?**

- ... well, actually, some folks argue that the increase in living standards for the typical person in the wealthy nations stopped a decade or two ago

  leading to political upheaval we are now experiencing

- But that is a story for later.

▶ **Wrapping up**

- I hope you are getting a feel for the big points we started with
- Markets work well, but only under certain conditions
- Financial markets do not satisfy those conditions and often work poorly.

    with many problems stemming from asymmetric information.

- Thus, since about 1850, we've see a continuing evolution of private and public sector institutions and practices intended to mitigate the asymmetric information problems
- But the institutions and practices have not eliminated the problems, and instead provide imperfect 'work arounds.'
- While Bagehot was pretty giddy about the progress as of 1850, we now know that we'd only scratched the surface in moving toward an efficient flow of captial.
- But even in his giddiness, Bagehot knew the system was fraught with potential problems.

▶ **Bagehot**

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    I am by no means an alarmist. I believe that our system, though curious and peculiar, may be worked safely; but if we wish so to work it, we must study it. We must not think we have an easy task when we have a difficult task, or that we are living in a natural state when we are really living in an artificial one.

- So we continue to study and the institutions continue to evolve.