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

Jon Faust

http://e105.org/e266

January 30, 2018

- ...
  - You should know by now that under certain conditions, markets deliver good outcomes.

    Lots of buyers and sellers of identical well-understood items, etc.
  - I'll call these the 'perfect markets' conditions and outcomes

    we'll review them a bit more completely.
  - Because it is very important that you understand these, econ. professors spend a lot of time attempting to grind these ideas into your psyche.
  - We spend so much time teching the perfect market case that students (and many faculty) sometimes start to think something close to these conditions prevail in lots of real-world market settings.
- **Reality: after the intro level, much economics is about why markets fail and how private and public sector institutions and practices have evolved (or should evolve) to overcome those failures and deliver something closer to the perfect markets outcome.**
- **Essence of this course**
  - Special features of financial markets mean that the perfect market conditions are not even close to being.
  - Thus, in most economies in the world and for most of history financial markets have worked very poorly.
  - And this is bad news for everyone, because when financial markets work poorly, most other markets do as well.

- **Without healthy financial markets and institutions, economies founder and/or stagnate.**
- **Financial markets and institutions**
  - All economies have evolved an elaborate web of private and public sector financial institutions and practices to help financial markets work better an allow the economy to get closer to the perfect market outcomes.
  - This elaborate web is often very messy.
  - In some economies it works pretty well most of the time; in many economies it works very badly.
  - Even the best systems that have evolved so far remain very imperfect

    One symptom of this is that tragic financial crises 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 concepts and principles drive both the problems and the evolving solutions we see?
- **A whirlwind tour of financial history**
- **Real wages, 1200 to the present**

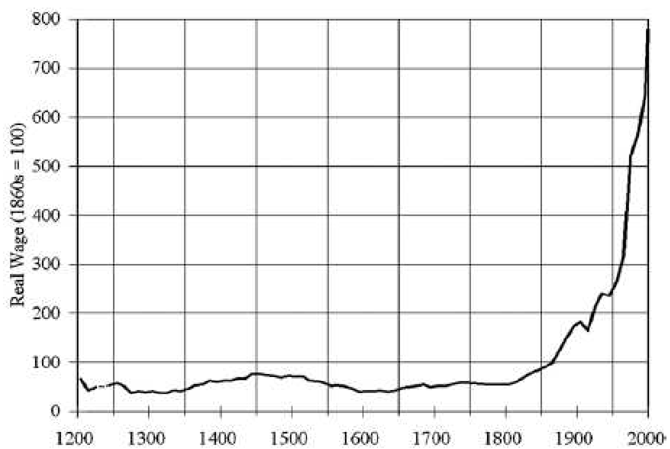



FIG. 1.—Builders' real day wages, 1209–2004 (source: table A2)

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 sustained 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 obviously changed in the mid-1800s
  - Q: What was different in the 1800s than before?
  - A: Well, lots of stuff, but most folks think the key was the (first and second) industrial revolutions

    Wikipedia provides a reasonable sketch of these go

    https://en.wikipedia.org/wiki/Industrial%5FRevolution
  - But a finance revolution taking place at the same time was almost certainly essential as well.
- **Walter Bagehot**

  - Bagehot was a great sage of finance; wrote in late 1800s. Victorian England.
  - Famous book: Lombard Street.

    go

    http://www.gutenberg.org/ebooks/4359
  - –

> 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)

- No finance, no revolution. . .
- He contrasts this with his modern setting

  > 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)

- Anybody with a good idea can get a loan; never before in history had this been seen

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

▶ **Elizabethan England**

- Elizabethan England: roughly 1560–1600

▶ **The age of Shakespeare**

▶ **Prevailing wisdom, Elizabethan England**

- Polonius: Neither a borrower nor a lender be.

  (Hamlet, Act 1, scene 3)

▶ **Let's be sure the picture is clear**

- 1600: Never borrow, Never lend

- 1870: Anybody with a good idea can get a loan.

▶ **So what led to this change?**

- Financial markets and institutions as they had evolved as of Elizabethan times were highly problematic and did not allow the economy to get close to the perfect markets outcome.
- Let's delve into some details

▶ **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

▶ **To be clear**

- Debt: promise of fixed payments
- Equity: no promise of fixed payment

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

▶ **Aside:: Hybrids**

- There have always been various hybrids of debt and equity, but the key distinction remains central in finance 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?**

- Polonius (correctly) presumes that loans would only take place between close acquantences
- Why? Repayment depends on future intentions of the borrower. You would only lend to someone to whom you had strong bonds of trust or obligation.
- Later we'll develop a particluar version of this argument labelled 'adverse selection'

- **. . . dulls the edge. . .**
  - Q: What is 'husbandry' in this context?
  - A: 'wise use of resources'
  - Q: So why does borrowing dull the edge of husbandry?
  - The idea is that borrowers are playing with someone else's money and are more likely to goof off than if exclusively their own money were at stake.

    we now 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 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?**
  - A key financial institution of the time was debtor's prison, where folks who didn't repay debts were sent.
  - 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 did 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 repayment 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`

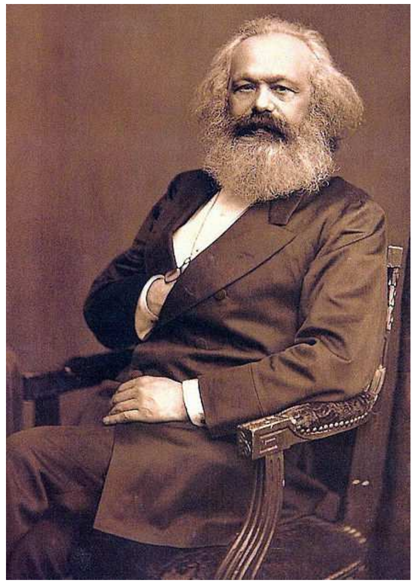
- This debate goes beyond the simpler points I'm making here.
- But the point is that understanding institutions is crucial for understanding economic outcomes.

▶ **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.
- So why wasn't equity finance the solution?

  Adam Smith (you remember, the guy with the invisible hands) provided the answer

▶ **Adam Smith**



- **Just kidding, that's Karl Marx. . . just checking if you are paying attention.**
- **Equity finance**
  - Equity finance involves a separation of ownership and management of the firm
  - You provide me equity financing, and if I use it wisely, you'll get a return that is some share of the fruits of my labors
  - In the Wealth of Nations, Smith argued that this 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.

  - It's a pretty simple, invisible hand, sort of argument: If you don't get the full benefits, why work hard?
  - One fix for this would be if the equity owners kept a close eye on things

    Closely monitor and oversee the managers and workers.

- **Sadly, equity owners are lazy dogs as well**
  - Smith again:

    > In a private copartnery [a partnership], 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**
  - The invisible hand means that equity financed-firms are doomed to fail
  - 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.

- **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 in certain cases personally responsible for all debts of the firm

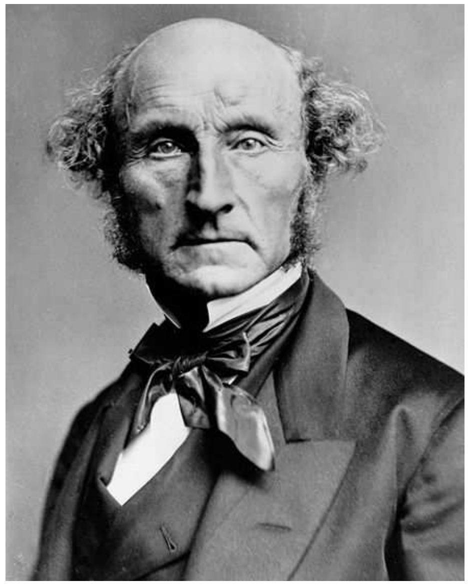
    > That is, if the firm goes under, the shareholders go to debtors prison.

  - 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 potential nightmares 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 the incentive problems in financial markets.

- **What changed?**

- **Enter J.S. Mill, 1800s**



- **J.S. Mill**
  - 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 sympathy with Smith's view of employees screwing off.

    Mill wrote of the 'universal neglect by domestic servants of their employer's interests'
  - But Mill 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.
  - The alternative to using equity finance was that basically only rich people could finance their good ideas

    As Bagehot put it, if you were not rich and didn't have rich friends, there was little incentive to have innovative ideas such as creating a railroad.
  - Let's face it, this wastes a lot of brain power

    Or as Mill put it, innovation might be left to second-rate minds
  - Mill:

    The stimulus of individual interest [from having your own money at stake] is some security for exertion, but exertion is of little avail if the intelligence exerted is of an inferior order…

- 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 help to align the interests of the managers and equity owners
- 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

- More generally, the 1800s saw rapid evolution of financial markets and institutions leading Bagehot to gush about the luxury that anyone with a good idea could get financing.

► **Reforms**

- The end of debtors prison in England

  disappeared many other places later

- We got 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 standards

► **At the same time**

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

  Well, continued through recent times anyway. . .

► **Aside:: A return to stagnation?**

- ... 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's a different story

▶ **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 rapid evolution of private and public sector institutions and practices intended to mitigate the asymmetric information problems
- 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.

▶ **A warning note**

- Bagehot noted that the luxurious system was prone to collapse:

  > 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 have financial crises, we continue to study, and the institutions continue to evolve.**