

Fintech: Economic implications

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Fintech in times of Bigtech



Donald J. Trump  @realDonaldTrump · 22 ч

....My only question is, who is our bigger enemy, Jay Powell or Chairman Xi?

 22 тыс.  13,2 тыс.  53 тыс. 

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Donald J. Trump  @realDonaldTrump · 22 ч

As usual, the Fed did NOTHING! It is incredible that they can "speak" without knowing or asking what I am doing, which will be announced shortly. We have a very strong dollar and a very weak Fed. I will work "brilliantly" with both, and the U.S. will do great..

 9,9 тыс.  15,2 тыс.  63,7 тыс. 

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Donald J. Trump  @realDonaldTrump · 23 авг.

Now the Fed can show their stuff!

 7,8 тыс.  13,1 тыс.  61,2 тыс. 

New Geneva report

- [Here \(September 2019\)](#)
- That's what I mostly care about: financial technologies and their impact on financial sector, Central banks and our well-being
- I would like to discuss three statements:
 1. [Labour market](#) and future of some industries in times of tech
 2. What will survive, banks, fintech or bigtech?
 3. Regulators: financial stability, monetary policy and future of regulation
- I was at NES Lectorium in April 2019, anything has changed?

1. Labour market and future of some industries in times of tech

- From the [ECB round table](#):
- “He showed that real non-college wages have been falling during the last 40 years, as many mid-skilled, mostly urban, non-college jobs have disappeared.”
- However:
- “[Internet rising, prices falling](#)” (2018) show that we might overstate inflation by 1% per year
- Meaning real wages went up...



1. What's going on with jobs?

Figure 1: Cumulative Change in Real Weekly Earnings of Working Age Adults Ages 18-64, 1963-2017

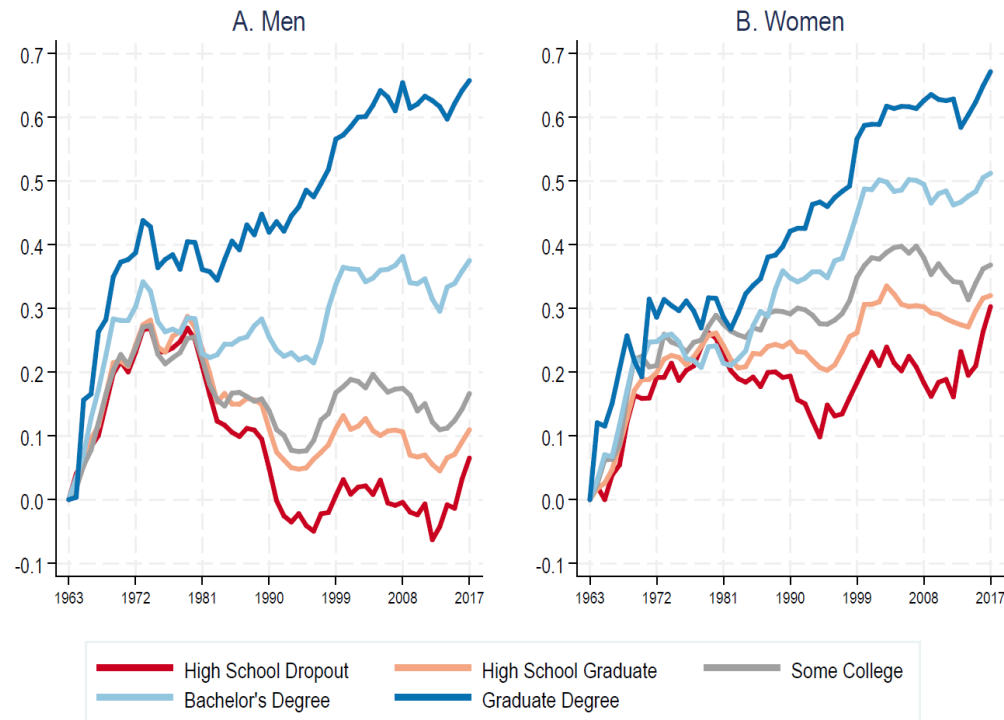
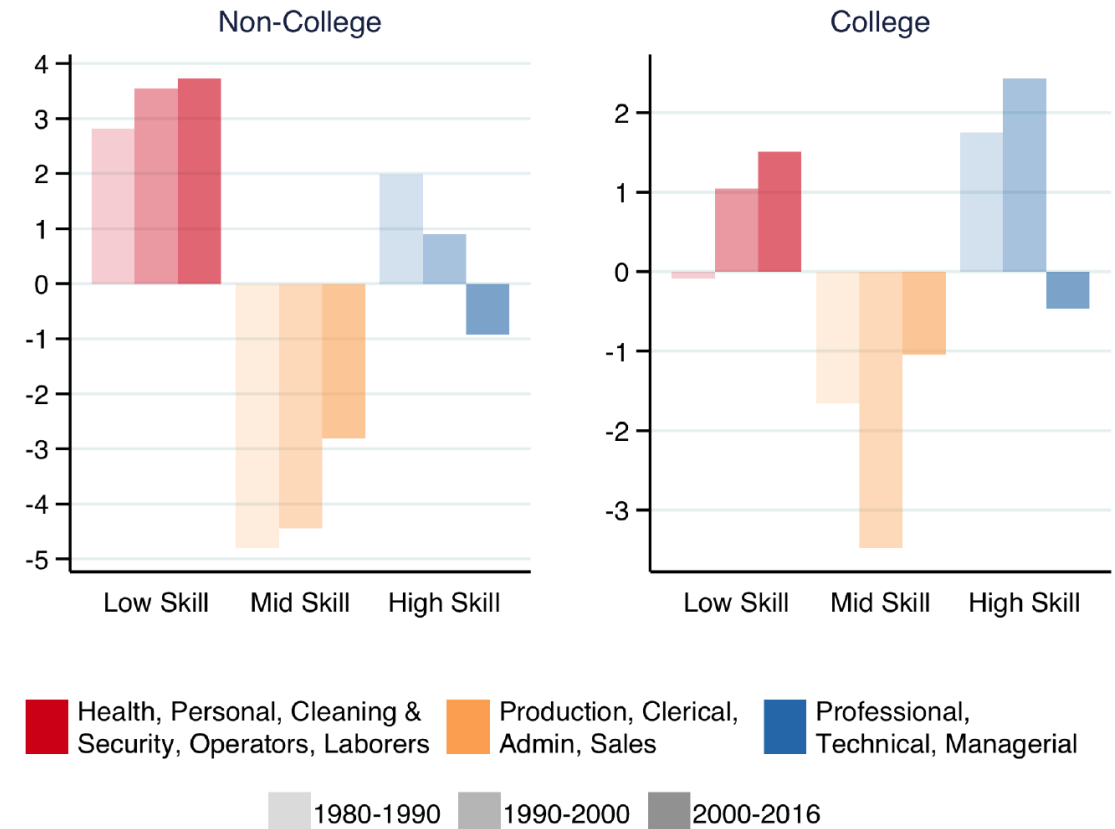


Figure 5: Changes in Occupational Employment Shares among Working Age Adults, 1970 - 2016



1. When technology creates jobs?

- “Will new technologies cause industries to shed jobs, requiring novel policies to address mass unemployment? Sometimes productivity-enhancing technology increases industry employment instead.
- “In manufacturing, jobs grew along with productivity for a century or more; only later did productivity gains bring declining employment. What changed? **The elasticity of demand.**
- “Using data over two centuries for US textile, steel, and auto industries, this paper shows that automation initially spurred job growth because demand was highly elastic. But **demand later became satiated, leading to job losses.**
- “**Automation** might not cause mass unemployment, but it **may well require workers to make disruptive transitions** to new industries, requiring new skills and occupations.”

1. When technology creates jobs?

Figure 3. Per Capita Consumption

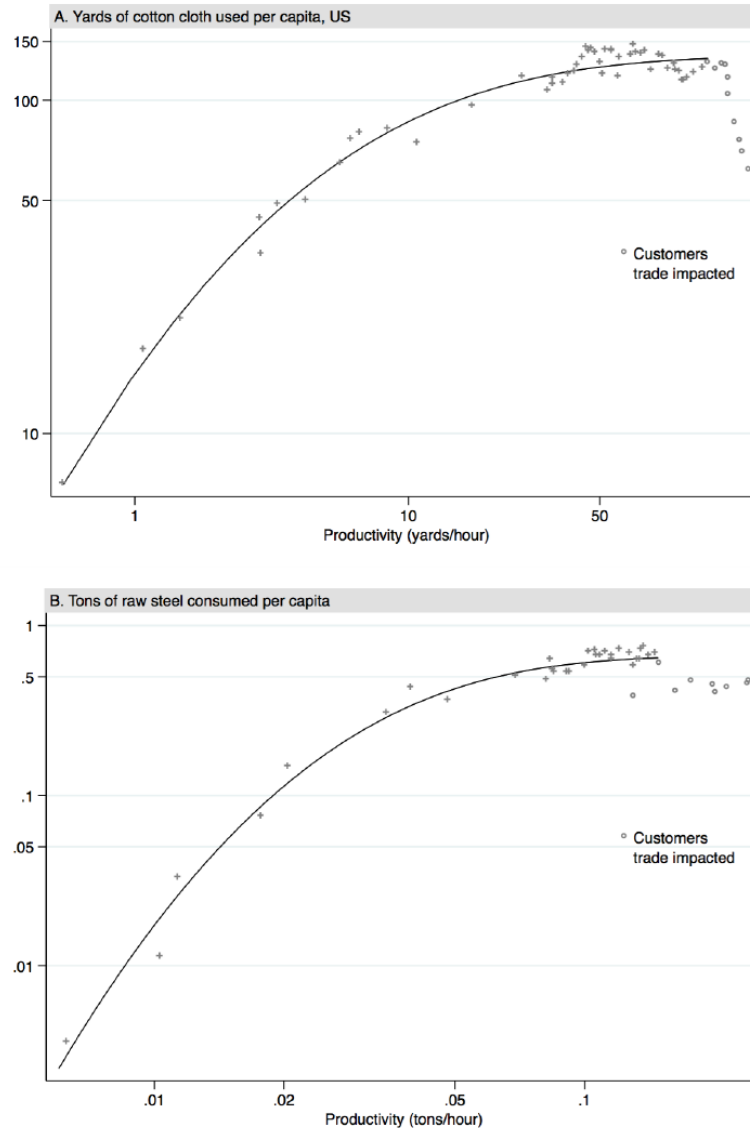
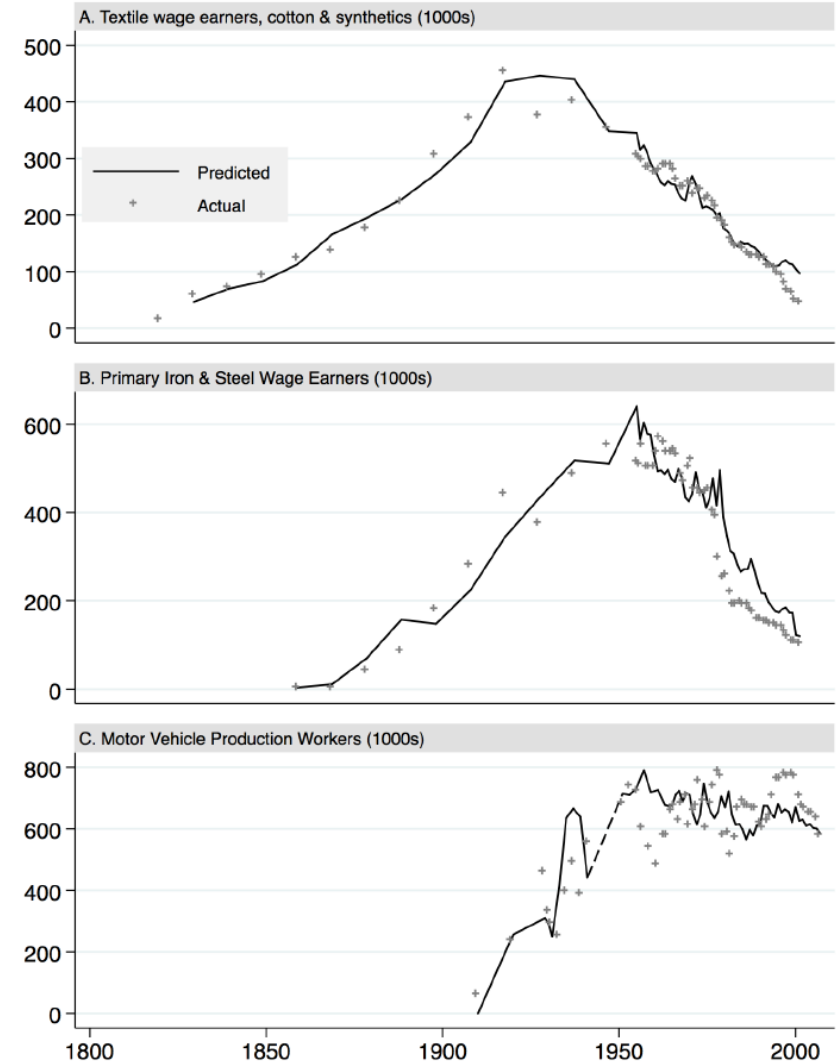


Figure 1. Production Employment in Three Industries



Note: The solid line represents predicted employment based on the model developed below.

1. What happens at firm's level?

- “We provide the first estimates of automation’s impacts on individual workers...”
- “...we find that firm-level automation increases the probability of workers separating from their employers and decreases days worked, **leading to a 5-year cumulative wage income loss of 11 percent of one year’s earnings.**”
- “These losses are only partially offset by benefits systems, and quite pervasive across worker types, firm sizes and sectors.”
- “Further, no such losses are found for computerization events.”

1. Conclusions

- “At least since the Industrial Revolution, observers of automation have incorrectly predicted the imminent demise of demand for labour.
- “Of course, this time is different. Now white collar and professional tasks are being taken over by machines and perhaps the pace and breadth of change are greater than past episodes of automation.
- “However, not everything is different. Human needs and wants are not very different and are not likely to be very different in 10 or 20 years. Because demand is not likely to change rapidly, **empirical analysis of current demand elasticities** and of the current impacts of productivity-improving technologies are **critical to inform policy** regarding the expected new wave of technology.
- “And demand may not only be elastic enough to mitigate unemployment effects, but it is likely to have different effects across industries as well”

2. Bloomberg

Technology

Banks Spend \$1 Trillion on Digital, But Few Reap the Rewards

By Elizabeth Rembert

21 June 2019, 00:24 GMT+3 *Updated on 21 June 2019, 15:37 GMT+3*

- ▶ Just 19 of 161 large banks see significant ROE gains: study
- ▶ There's a gap and 'it's coming from digital,' co-author says

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While global banks have been pouring money into information technology -- to the tune of \$1 trillion over three years -- only a handful appear to be fully committed to a digital transformation and are therefore reaping the benefits, according to an Accenture Plc study.

Just 19 of the 161 largest retail and commercial banks that the consulting firm examined have been focusing enough on digital strategies to “make the shift to a different sort of bank,” Accenture said in the report, released Thursday. And those that did were rewarded for their efforts, the firm said.

All the banks studied, based in 21 countries, started at roughly similar rates

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2. What will survive, banks, fintech or bigtech?

- That's a serious question discussed at Geneva (2019)
- Effectively, there is a number of questions regarding the ability of all three sides to retain customers
- We are at the very start of Libra Facebook cryptocurrency project with a number of prominent participants, including Mastercard, Uber, Lyft, Paypal and so on
- So not only Fintech, but also Bigtech may eat bank's pie quite fast

2. What will survive, banks, fintech or bigtech?

Table 4 Banks versus their partners and competitors

Banks vs competitors	Big banks	FinTech	Big Tech
Technology	✗	✓	✓
Customer experience	□	✓	✓
Size (scale & scope)			
Cost of funding	✓	✗	✗
Network effects	✓	✗	✓ ✓
Policy-based			
Prudential regulation	□	□	✓
Data privacy/protection	✓	□	✗
Political/lobby power	✓	✗	✗

Note: Red crosses are disadvantages, the blue ticks are advantages, and the black empty squares are neutral or in the midst of change.

3. Regulation in times of Fintech and Bigtech

<https://econs.online/articles/ekonomika/kak-sotsialnye-seti-vliyayut-na-rynki/>

Social networks are actually quite important in novel times

And in general, data is too big to manage easily

And there are serious contenders to the Central banks

Как социальные сети влияют на рынки

Всего один твит способен сдвинуть рынок. Но эффект далеко не универсален, обычно непродолжителен, а сообщения могут быть манипуляцией.

24 сентября 2019 | Михаил Тищенко

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Это произошло менее чем за три минуты: появление фальшивого твита во взломанном хакерами аккаунте Associated Press о том, что в Белом доме взрыв и президент ранен, и последовавший обвал фондового рынка, уничтоживший более \$130 млрд стоимости компаний S&P 500. Произошедшее в апреле 2013 г. было первым обвалом рынка, спровоцированным твиттером, фиксирует The Economist. И таким же коротким, как твиты: к вечеру рынок восстановился.

Нынешний президент США – сам активный пользователь твиттера и регулярно демонстрирует примеры того, как сообщения в социальных сетях могут приводить к существенным изменениям на рынках. Одна из компаний

3. Monetary policy in time of fintech

- Technology is the key
- Central banks would have to increase speed of innovations, both with the market and with other regulators
- Think about Libra once again
 - White paper and how it will be invested
- This is almost private money
- And at the same time – mutual fund

3. Immediate reaction of regulators

- Many regulators, including the US, France, Germany etc., said “no way”
- Why? It immediately impacts:
 1. International remittances
 2. Monetary policy
 3. Taxes (remember Bitcoin and some US states), paying for goods and services
 4. Currencies both included and excluded from Libra
 5. (New) Systematic risk in financial markets

3. What regulators will have to do?

- Be ready with technological changes, both IT infrastructure and serious hard skills of internal stuff
- Kind of easy, they have lots of data to attract talented people
- Learn from other regulators, financial and non-financial commercial firms
- Not so trivial, sometimes goals and problems are very different
- Be prepared to change supervision ASAP if the market changes
- Someday fintech innovations may come from ordinary people issuing own cryptocurrencies...
- So they need some experimentation even if the applications seem distant from now

Conclusions

- Fintech will soon feel Bigtech influence
- Regulators already adjust to fast changes in the environment
- Labour market seems to change: we have harvested low hanging fruits (over the last 100 years), what's next?
- Maybe banks will survive, yet pressure from Bigtech is very different from the Fintech impact