On Post-Pandemic Safety Net in Japan

Lecture at the Japan Economic Association Meeting, May 16, 2021

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Outline

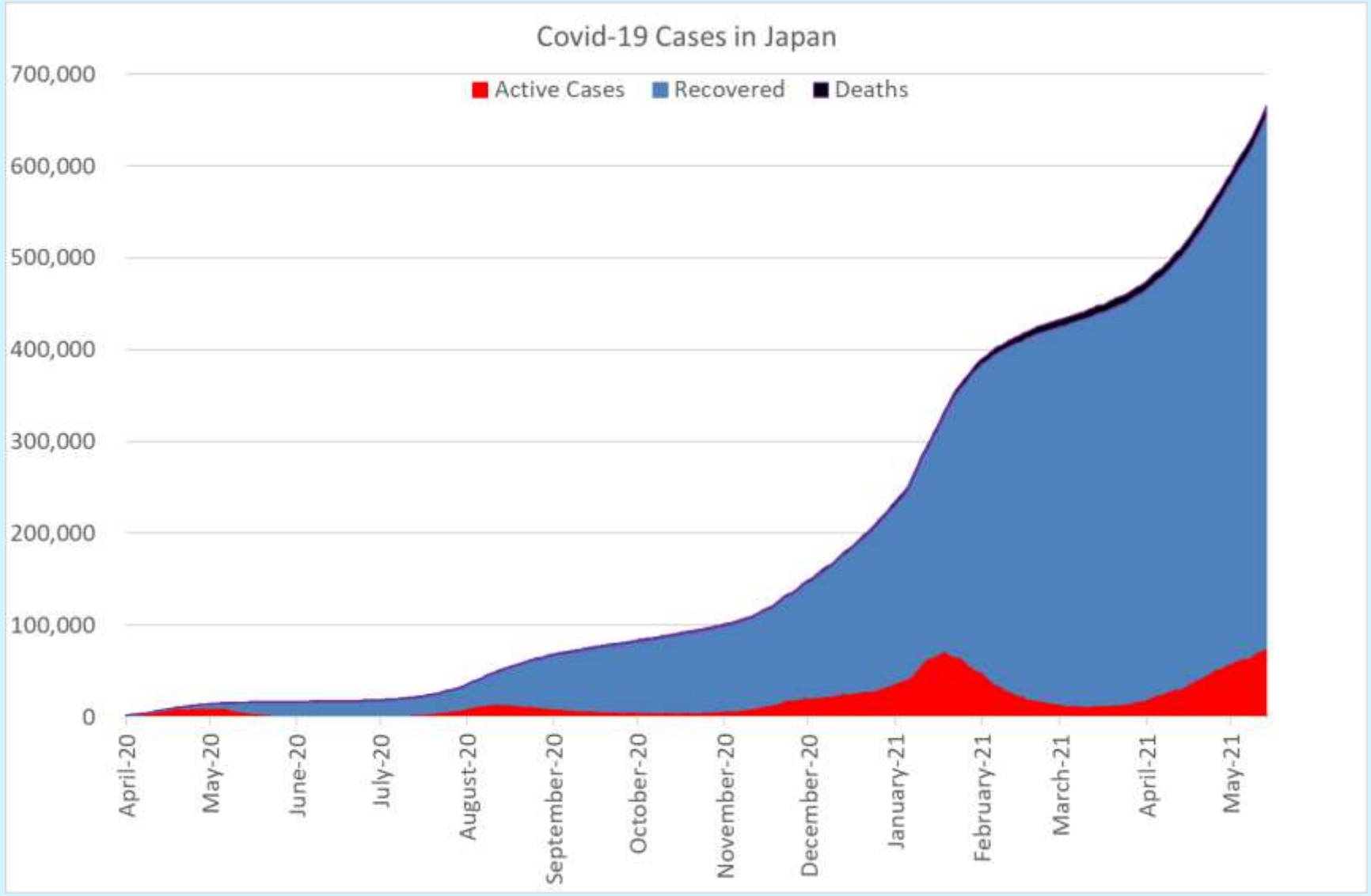
1. The health impact of the COVID-19 in Japan has not been as grave and the government imposed less restrictions on economic activities compared with other advanced economies. Nonetheless, the Japanese economy suffered almost as much as the other countries.
2. The pandemic has revealed various problems in the Japanese economic system. One of those is the nature of safety net for the workers whose jobs are in danger.
3. Traditionally Japanese government supported the troubled companies so that they can maintain the jobs. This has been the case again during the pandemic.
4. This traditional (and current) policy has two potential problems.
   (i) Protects only workers that are under the lifetime employment system (this is already happening)
   (ii) Can end up protecting zombie firms (this may happen soon)
5. Japan needs new safety net that helps workers directly.

Health impacts of the Covid-19 pandemic

- Cumulative numbers per million population as of May 11, 2021.
- Source: https://www.worldometers.info/coronavirus/#countries and https://ourworldindata.org/covid-vaccinations

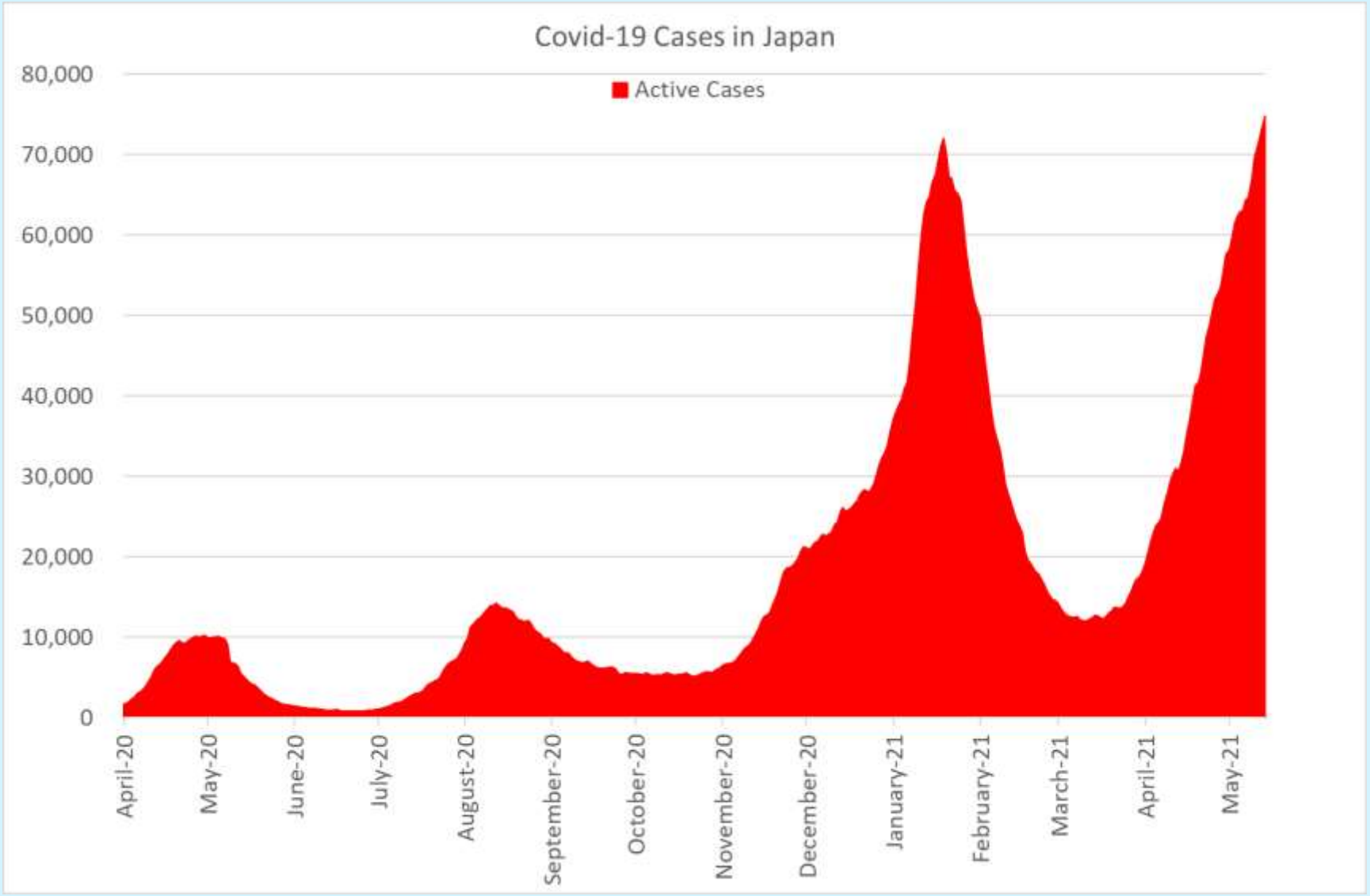
	Cases	Deaths	Tests	People with at least one dose of COVID-19 vaccine (%)
Japan	5,120	87	99,909	2.91% (May 11)
China	63	3	111,163	
South Korea	2,500	37	178,616	7.21% (May 11)
Singapore	10,425	5	1,772,852	31.67% (May 10)
India	16,772	183	219,597	9.90% (May 11)
USA	100,851	1,794	1,383,677	45.88% (May 11)
UK	65,105	1,872	2,448,108	52.42% (May 10)
Italy	68,282	2,042	1,018,682	28.67% (May 11)
France	88,691	1,635	1,217,432	26.86% (May 10)
Germany	42,187	1,021	676,516	33.10% (May 10)

Cumulative Covid-19 Cases in Japan



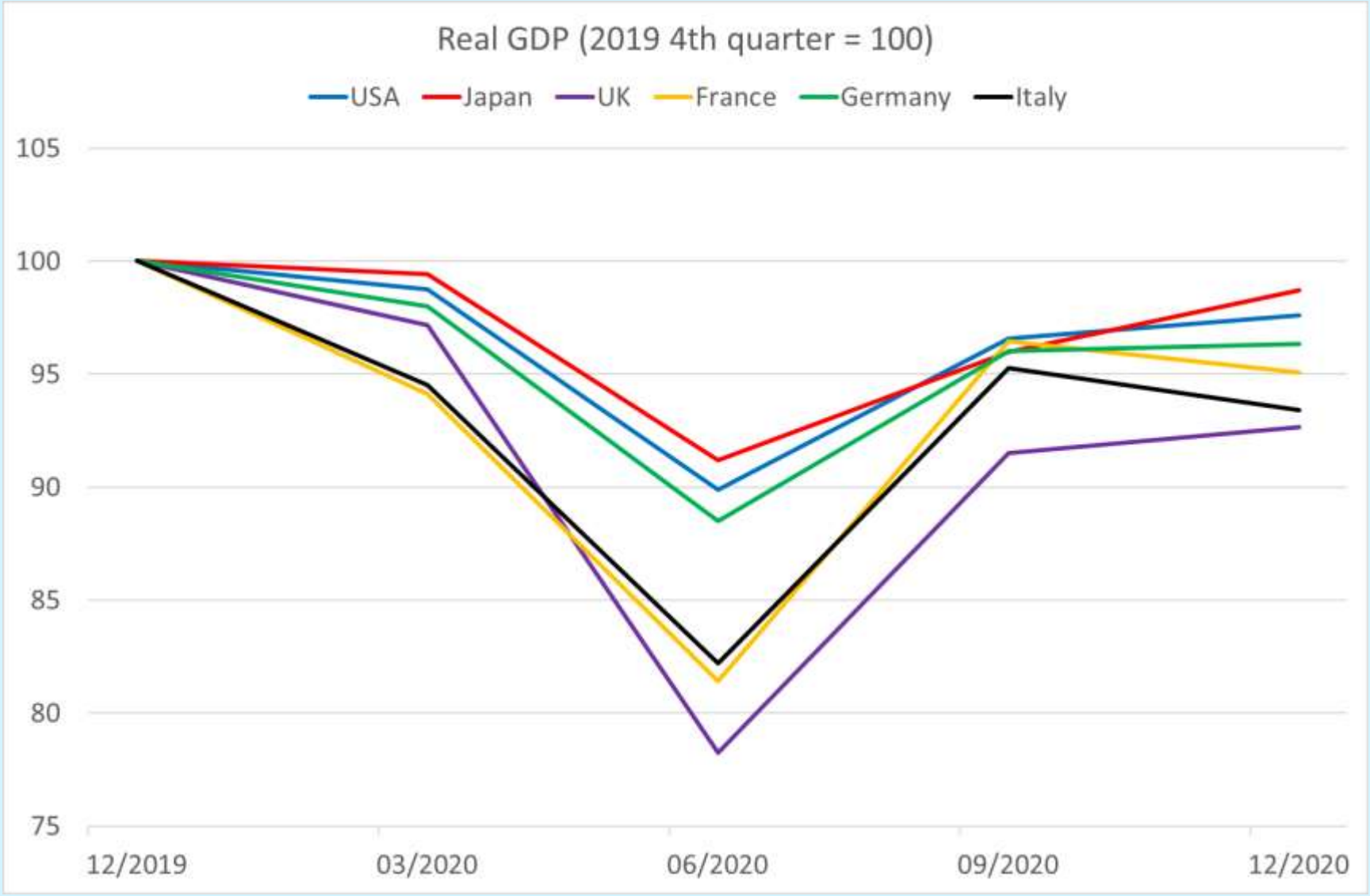
Source: CEIC Data

Active Covid-19 Cases



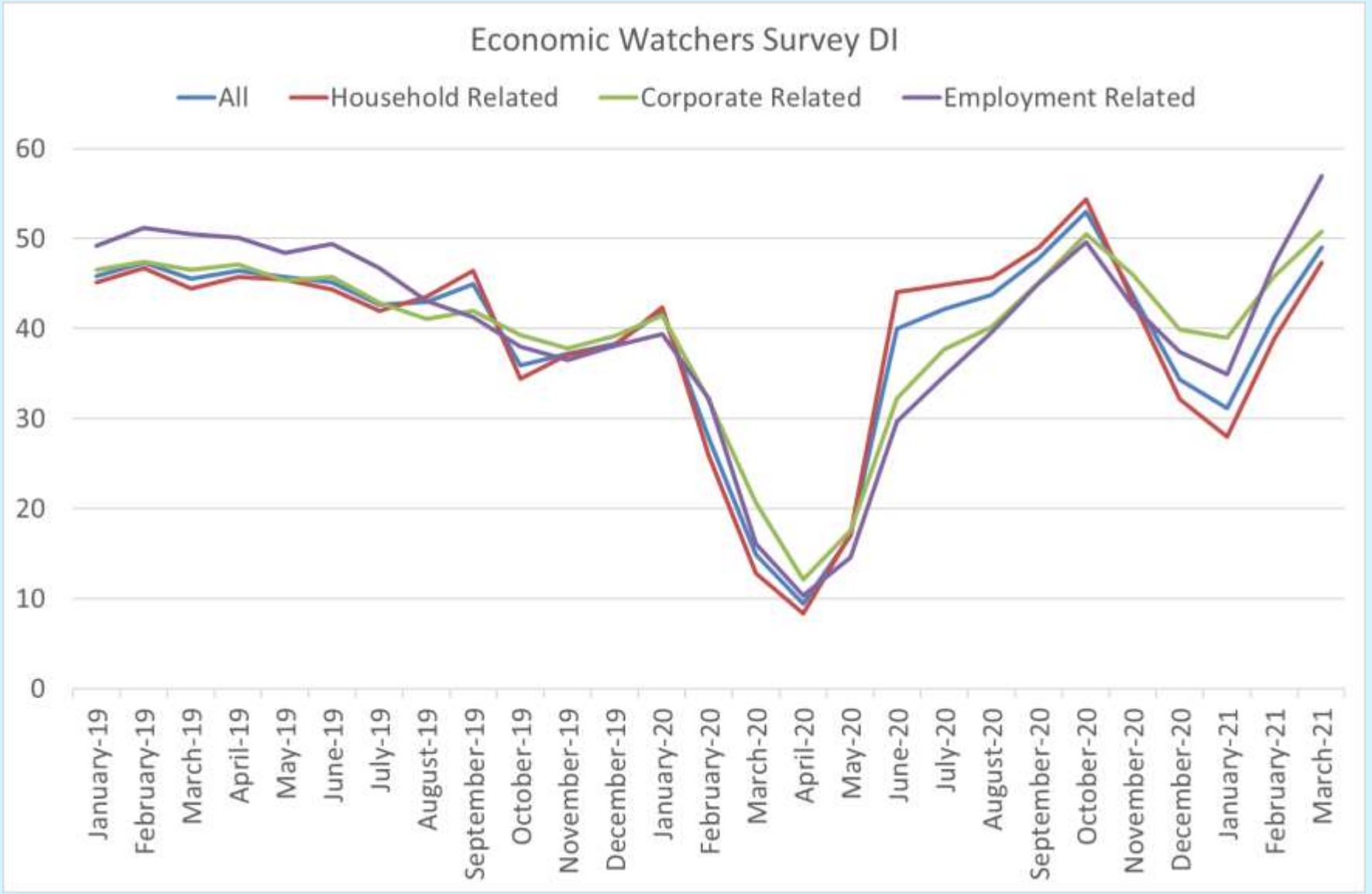
Source: CEIC Data

Economy suffered as much as other countries

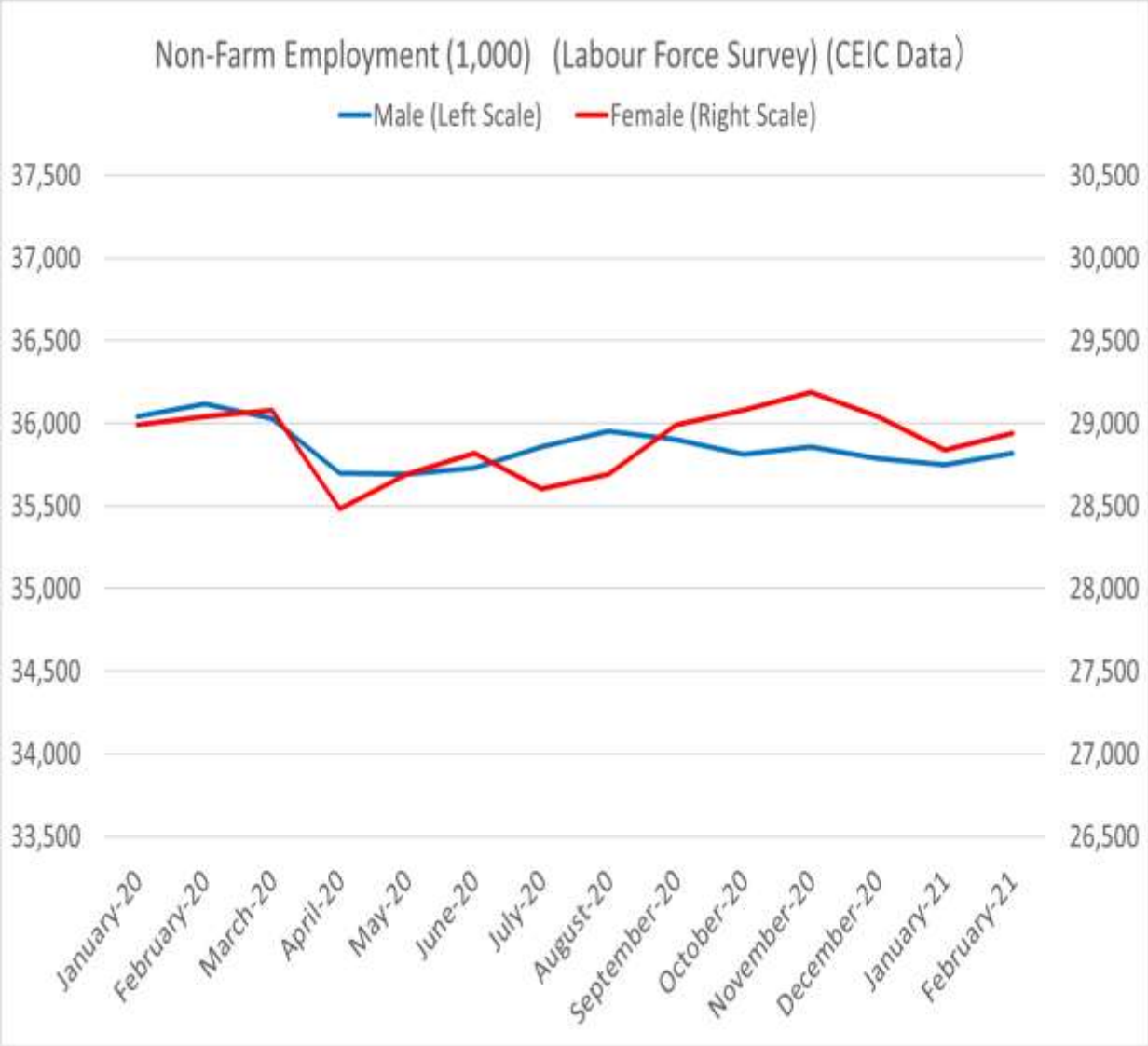


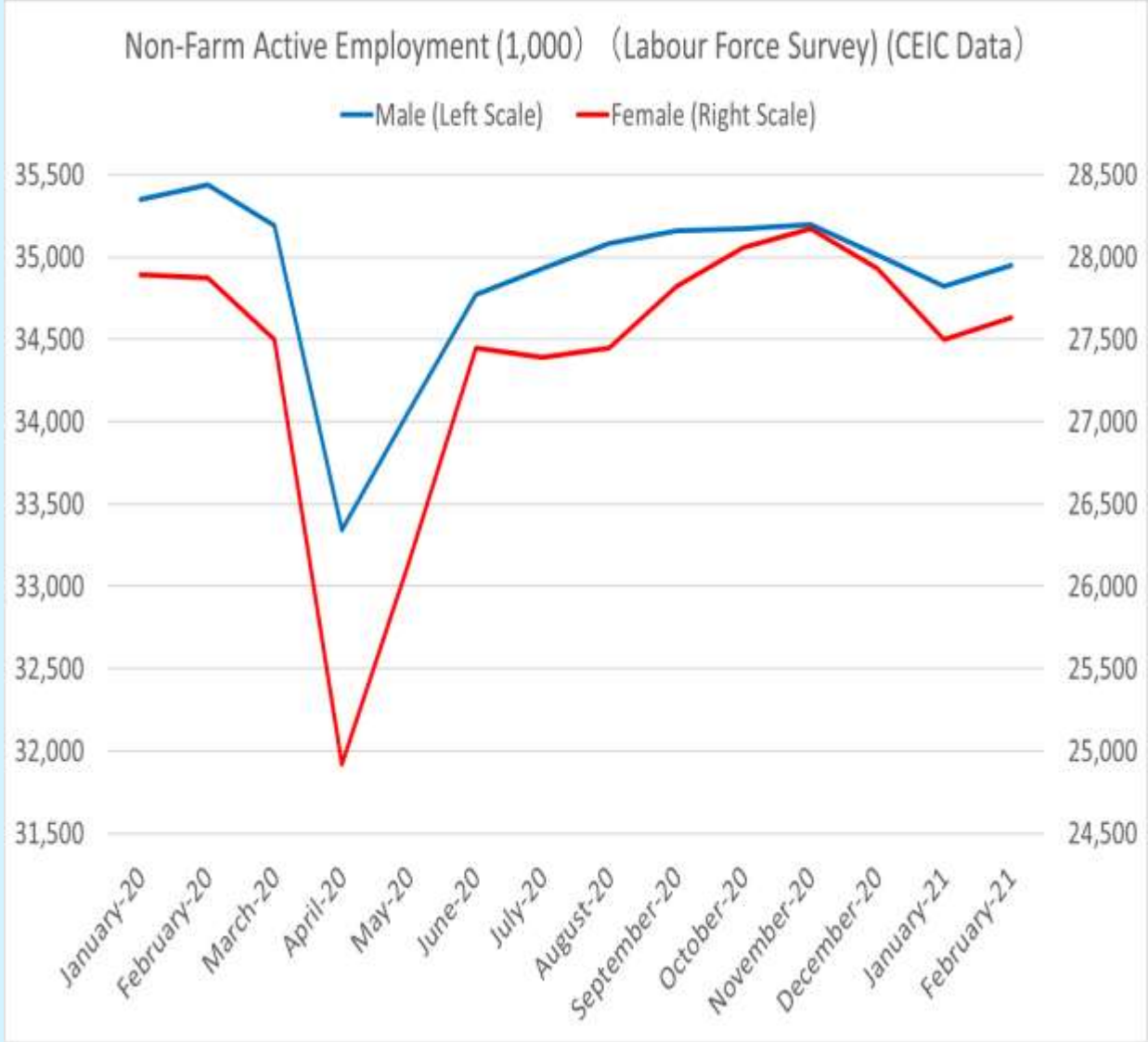
Source: CEIC Data

Business Conditions and State of Emergency



Active Employment (= Employment – Furloughed)





But employment has been rather stable

- Many policy measures to protect corporations so that they can maintain employment
- For example, ……..
  - Employment adjustment subsidy
  - Business continuity grant
  - Office rent grant
  - Concessional (zero-interest, zero-guarantee fee) loans from (1) Japan Finance Corporation, (2) Shoko Chukin Bank, and (3) private sector banks
- Some policies assisted workers/households directly, but the amount was smaller
- For example, …….
  - Special cash payment of ¥100,000 per person
  - Emergency loans for households

Three supplementary budgets in Fiscal 2020

- ¥45,013 billion considered as economic supports (as opposed to prevention of infection, etc.)
- ¥31,136 billion (69%) was to help corporations and ¥13,877 billion (31%) was to help workers/households
- ¥3,295 billion out of the Reserve Fund (予備費) considered as economic supports
- ¥1,808 billion (55%) was to help corporations and ¥1,487 billion (45%) was to help workers/households
- In addition, ¥1,622 billion from the unemployment insurance special account was used for Employment Adjustment Subsidies (雇用調整助成金)

Date	Total Size (¥ billion)
April 2020	25,691
May 2020	31,911
January 2021	19,176

Distinguishing assistances (mainly) to firms and individuals: Example

A part of the first supplementary budget of FY 2020 (April 2020)

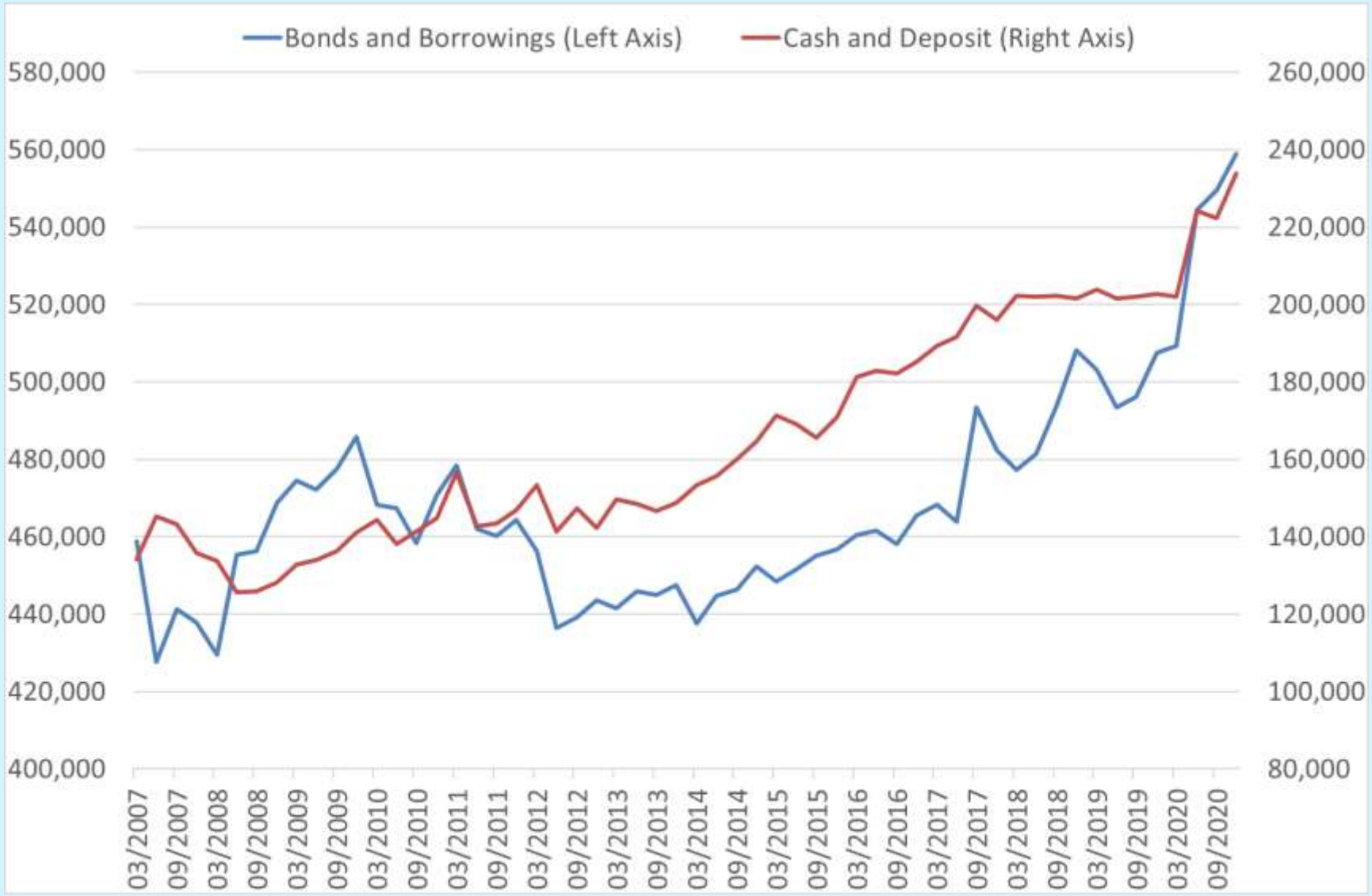
				経済対策	企業支援	個人支援
雇用の維持と事業の継続		19,490.5				
雇用調整助成金の特例措置の拡大			69.0	1	1	
中小・小規模事業者等の資金繰り対策			3,831.6	1	1	
中小・小規模事業者等に対する新たな給付金			2,317.6	1	1	
全国すべての人々への新たな給付金			12,880.3	1		1
子育て世帯への臨時特別給付金			165.4	1		1
その他			226.6			

Results of government supports for corporations

- Bank loans increased
- Corporate deposits also increased

- Number of corporate failures was kept low
- Job losses were kept low

Bank Loans Increases (So Do Cash Holdings) (MOF Survey)

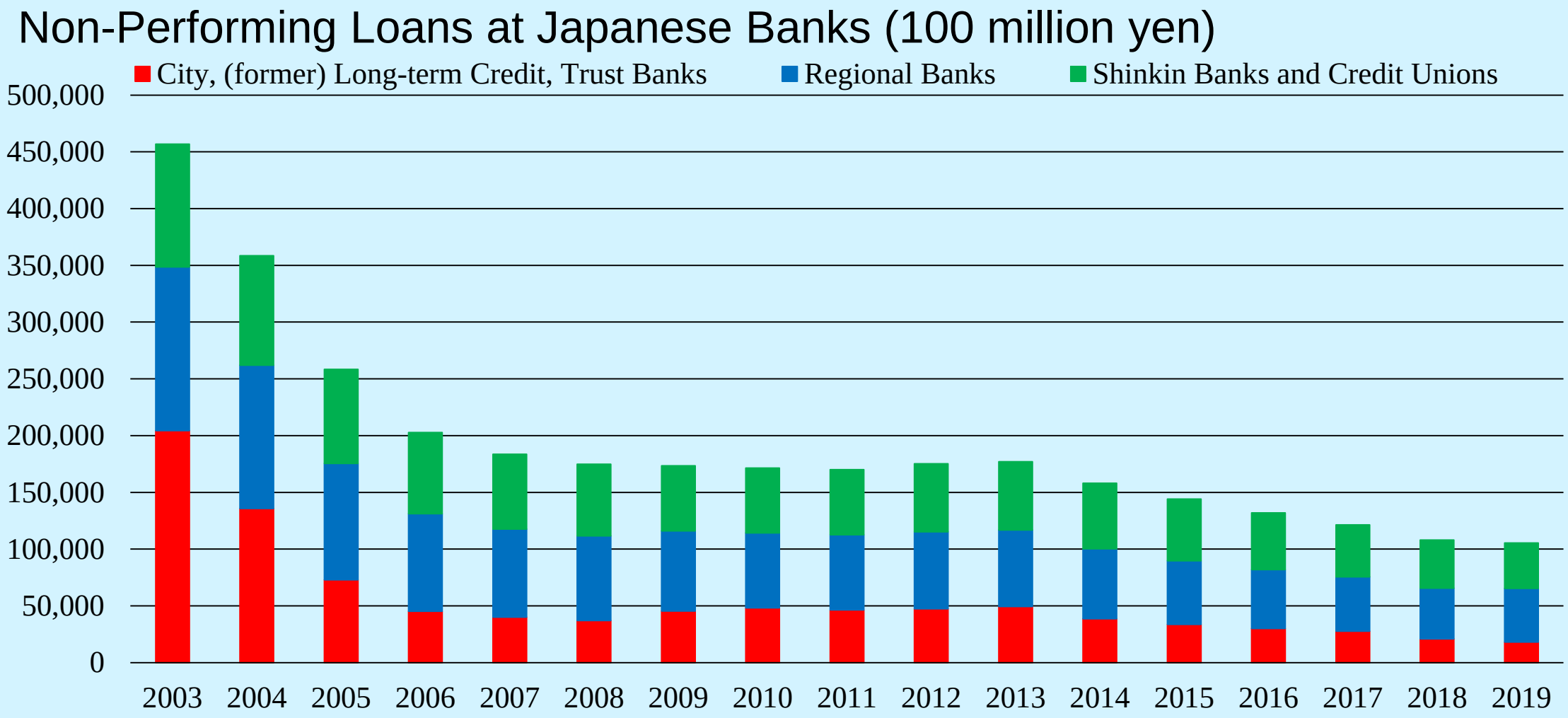


Source: CEIC Data

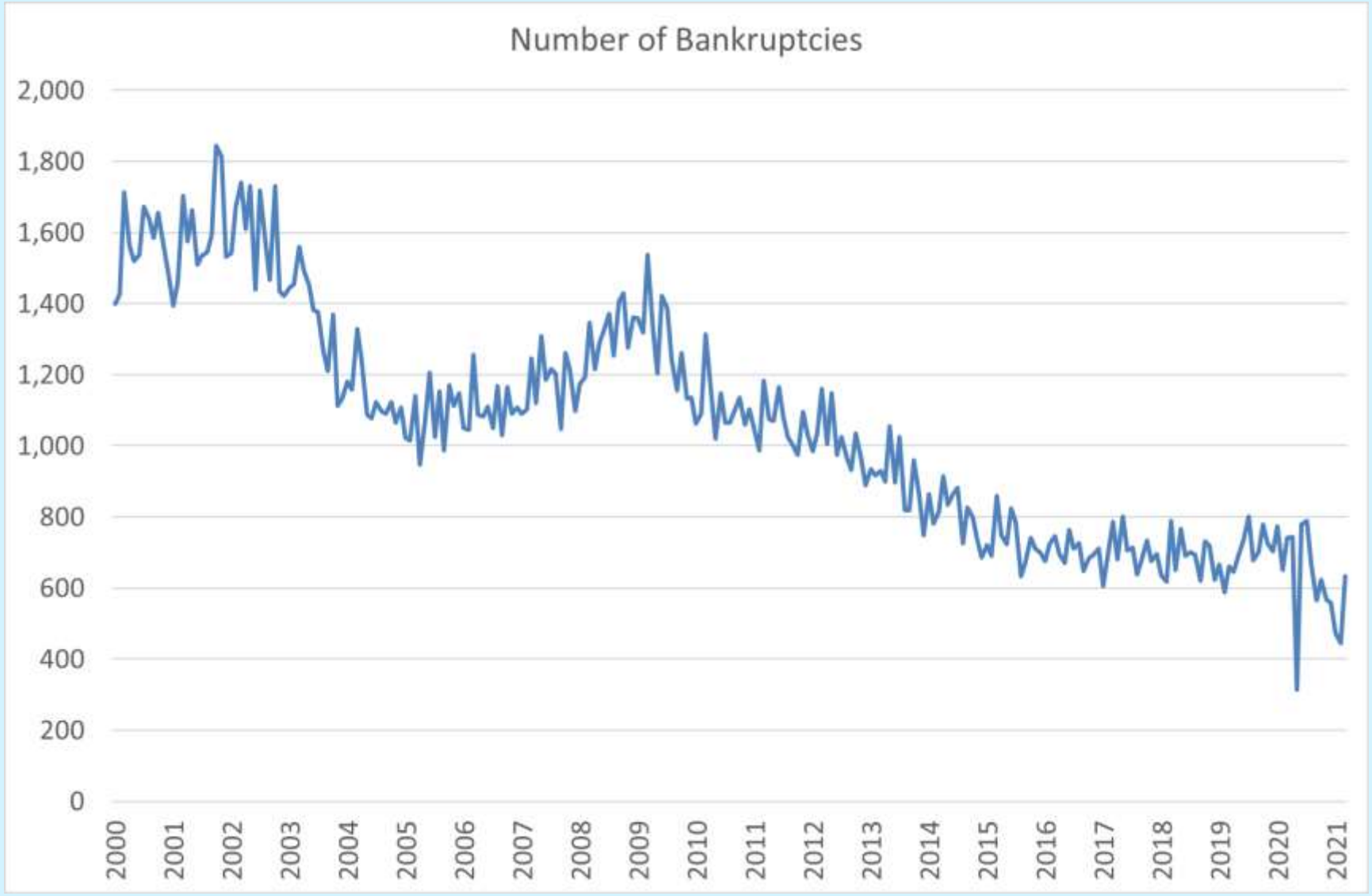
Similar Support after the Global Financial Crisis

- Tried to protect SMEs by encouraging banks to roll over non-performing loans
- Nov. 2008: With a restructuring plan to recover in 5 to 10 years, a restructured SME loan can be classified normal (rather than non-performing)
- Dec. 2008: Effectively reduced the risk weight on SME loans
- Dec. 2009: SME Financing Smoothing Act: SME loan can be classified normal if there is a plan to come up with a restructuring plan
- Mar. 2013: SME Financing Smoothing Act expired but SFA continued to encourage financial institutions to help SMEs → Loan modifications continues
- Many non-performing loans were still hidden just right before the COVID-19 crisis

With similar results

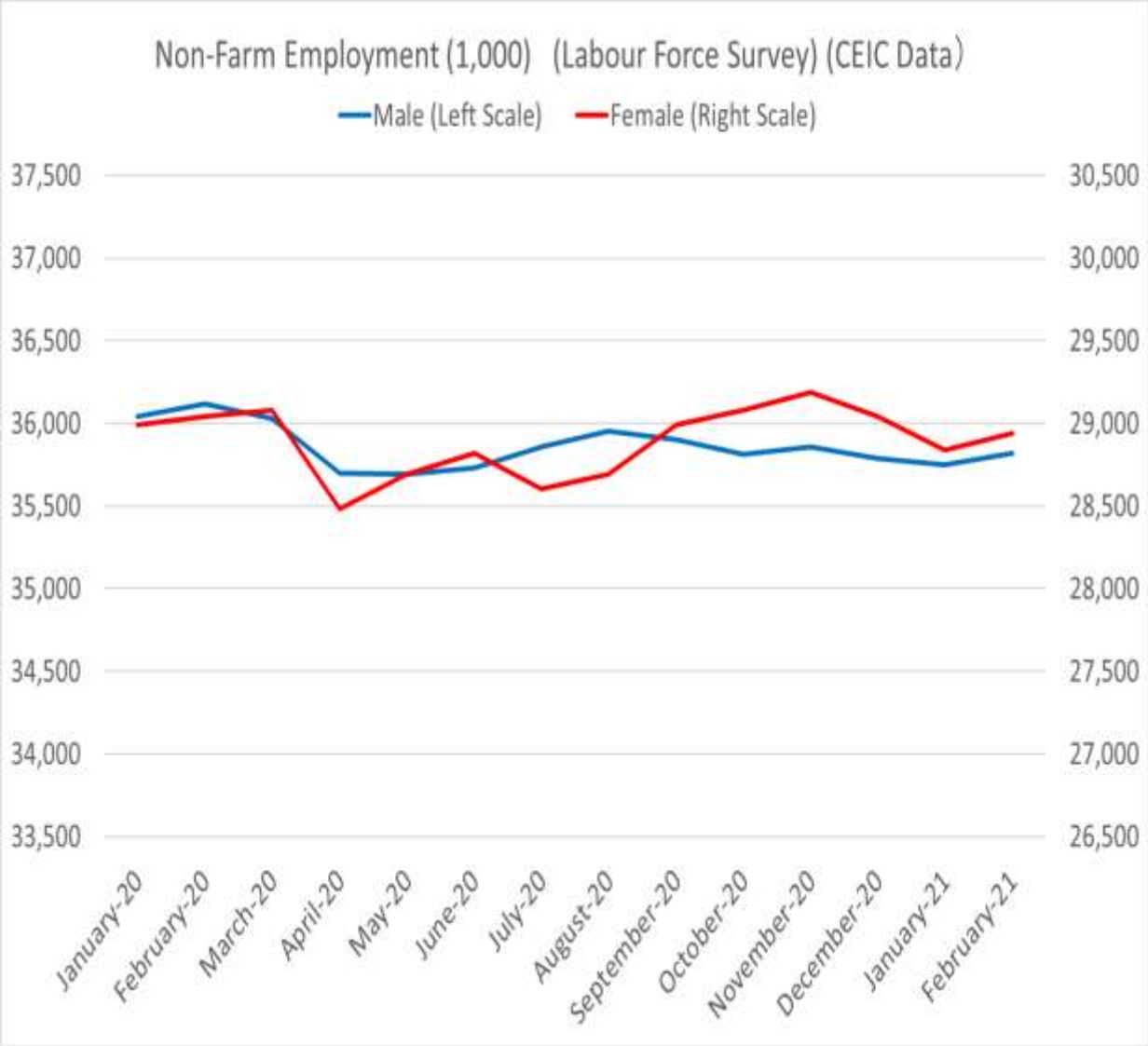


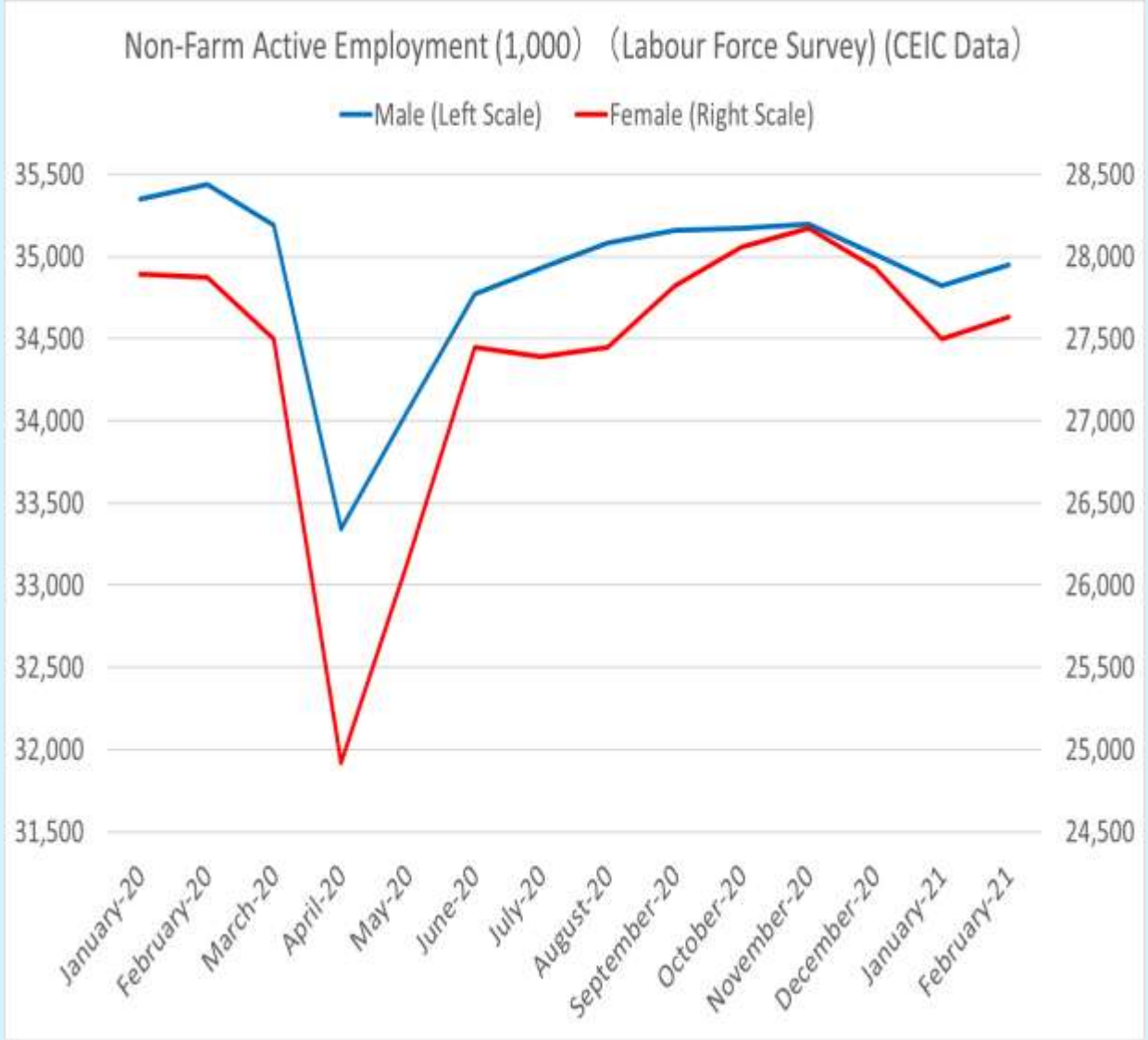
Number of Bankruptcies (Tokyo Shoko Research)



Source: CEIC Data

Active Employment (= Employment – Furloughed)





Job losses are concentrated on …

- Female (not in GFC) non-regular workers at small firms

	March 2009	Sept. 2020
Non-Farm employment	-0.45%	-0.34%
Male, Non-Fram employment	-0.68%	-0.20%
Female, Non-Farm employment	-0.12%	-0.50%
Regular (*seiki* in 2020, joyo in 2009)	-0.32%	0.61%
Non-regular (rinji in 2009)	-1.85%	-2.39%
Firm size 1-29 employees	-1.27%	-0.26%
Firm size 30-499 employees	-1.17%	-0.41%
Firm size 500 employees or more	1.07%	0.16%

- Percentage change in the employment from a year ago (author's calculation based on data from the *Labour Force Survey* (Ministry of Health, Labour and Welfare)

What kind of jobs were lost?

- Two papers by Kikuchi, Kitao, and Mikoshiba.

1. Shinnosuke Kikuchi, Sagiri Kitao, Minamo Mikoshiba (2020a). “Heterogeneous Vulnerability to the COVID-19 Crisis and Implications for Inequality in Japan,” CREPE Discussion Paper No. 71.
2. Shinnosuke Kikuchi, Sagiri Kitao, Minamo Mikoshiba (2020b). “Who Suffers from the COVID-19 Shocks? Labor Market Heterogeneity and Welfare Consequences in Japan,” CREPE Discussion Paper No. 80.

- First one is an ex ante analysis, the second one is an ex post analysis

Kikuchi, Kitao, and Mikoshiba (2020a)

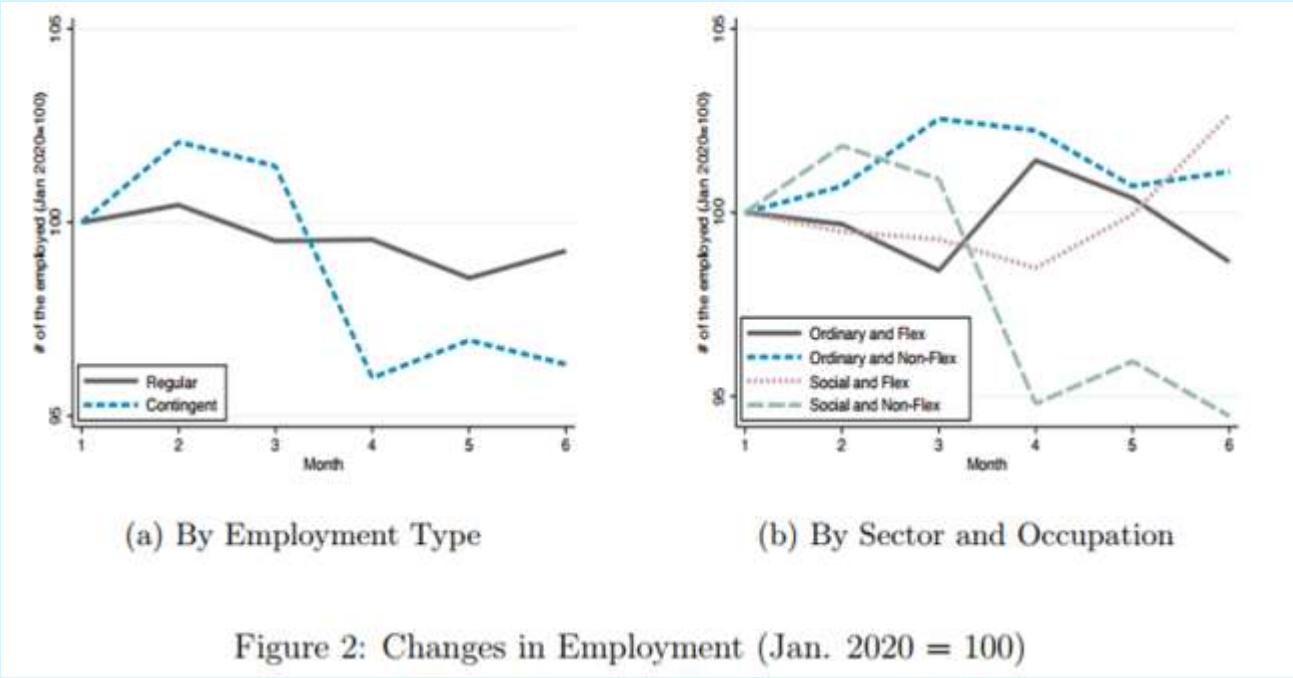
- Covid-19 shock impacts **non-regular** workers with **non-flexible** (difficult to remote work) jobs in **social** (requires face-to-face interactions and/or regular commute) industries, whose earnings are very low to start with.

Employment share (%) and average earnings (1,000 yen) by employment type (Table 4 of the paper)

Regular workers			**Non-regular workers**		
	Ordinary	Social		Ordinary	Social
Flexible	26.0% 5,535	24.0% 5,136	Flexible	12.9% 1,694	23.0% 1,697
Non-flex	32.8% 4,534	17.2% 3,981	Non-flex	20.2% 1,624	43.9% 1,338

Kikuchi, Kitao, and Mikoshiba (2020b)

- Covid-19 shock indeed hits **non-regular** workers with **non-flexible** jobs in **social** industries.
- Contingent workers (non-regular workers) than regular workers
- Non-flexible jobs in social industries than flexible jobs in ordinary industries



(a) By Employment Type

(b) By Sector and Occupation

Figure 2: Changes in Employment (Jan. 2020 = 100)

Kikuchi, Kitao, and Mikoshiba (2020b)

- Female than male
- Young than old

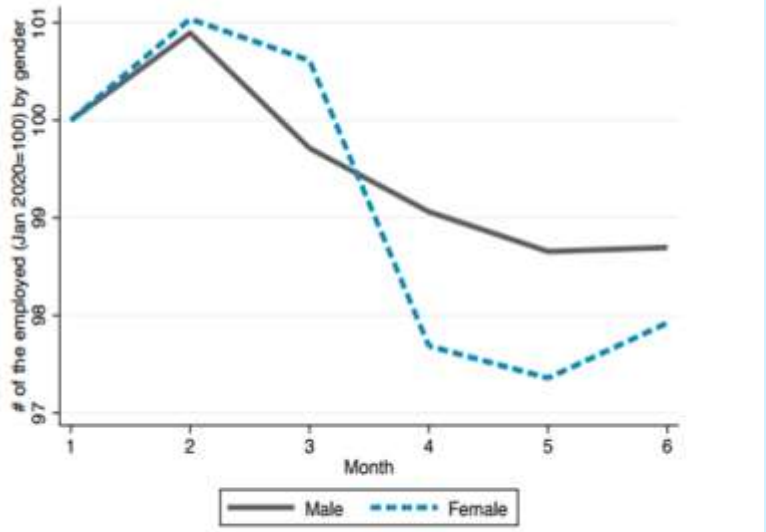
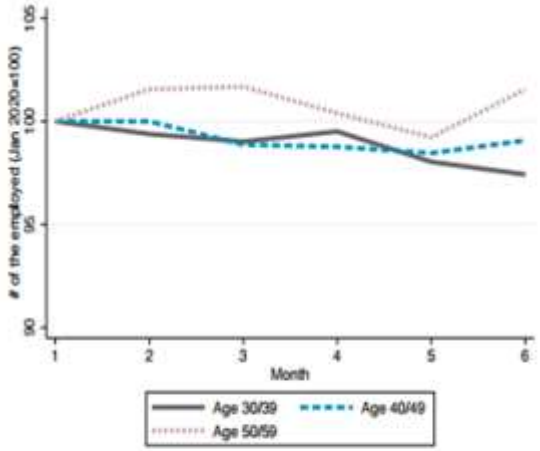
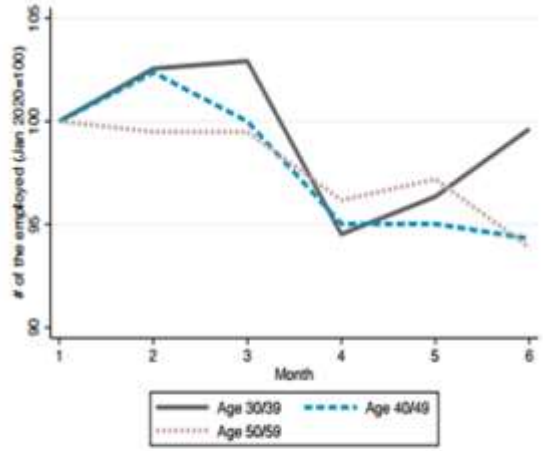


Figure 3: Changes in Employment by Gender (Jan. 2020 = 100)



(a) Regular Workers



(b) Contingent Workers

Figure 5: Changes in Employment by Age Group (Jan. 2020 = 100)

Hidden Unemployment

Shinichiro Umeya and Kana Takeda (2021).『なぜ「実質的失業者」に支援の手が届かないのか (Why the Help does not Reach the “Effectively Unemployed”)』, Nomura Research Institute.

武田佳奈「パート実質失業、女性で100万人超え:コロナ禍対応力付ける対策を」『日経ビジネス』2021年4月5日号、78－79ページ。

- Survey of 64,943 part-time workers (57,131 women and 7,812 men) in February 2021.
- 13.1% of the female respondents say their working hours declined by more than 50%
- Of which, 69.3% fail to receive compensation for furlough
- 13.1% x 69.3% = 9.1%. When applied to the population (11.35 million part-time workers), 1.031 million women are “effectively unemployed.”
- Similarly 0.434 million men are effectively unemployed.

Zombie problem in Japan in the 1990s ……

- Zombie Firm: a firm that is unprofitable and would cease to exist without help from creditors and/or the government
- Initially identified for Japan in the late 1990s, when under-capitalized banks hesitated to recognize losses and instead rolled over loans to weak firms
- Ricardo Caballero, Takeo Hoshi, and Anil Kashyap (2008). "Zombie Lending and Depressed Restructuring in Japan," *American Economic Review*, 98, 1943–77.
- 星岳雄 「ゾンビの経済学」、岩本康志、太田誠、二神孝一、松井彰彦編『現代経済学の潮流2006』 東洋経済新報社、2006年、41－68ページ。
- Zombie firms have been found to discourage growth of productive firms for Japan

Spillovers from Zombies to Non-Zombies

$$\text{Activity}_{ijt} = \delta_1' D_t + \delta_2' D_j + \beta \text{nonz}_{ijt} + \chi Z_{jt} + \varphi \text{nonz}_{ijt} * Z_{jt} + \varepsilon_{ijt} \qquad (26)$$

Employment growth or Investment

or Productivity

$$\text{Activity}_{ijt} = \delta_3' D_{jt} + \beta \text{nonz}_{ijt} + \varphi \text{nonz}_{ijt} * Z_{jt} + w_{ijt} \qquad (27)$$

industry-year specific dummy

Firm-specific sales growth

$$\text{Activity}_{ijt} = \delta_3' D_{jt} + \beta \text{nonz}_{ijt} + \varphi \text{nonz}_{ijt} * Z_{jt} + \theta s_{ijt} + v_{ijt} \qquad (28)$$

Impact of Zombie Firms on the Investment, Employment and Productivity of Non-Zombies

Dependent Variable	I/K	ΔLog E	Log Sales – ⅔ Log E – ⅓ Log K	I/K	ΔLog E	Log Sales – ⅔ Log E – ⅓ Log K	I/K	ΔLog E	Log Sales – ⅔ Log E – ⅓ Log K
Non-Zombie Dummy	0.0256 (0.0056)	0.00109 (0.001751)	0.0139 (0.0135)	0.0248 (0.0057)	0.0002 (0.0018)	0.0119 (0.0137)	0.0238 (0.0056)	0.0001 (0.0017)	0.0150 (0.0136)
Industry Zombie %	-0.1370 (0.0376)	-0.0454 (0.0116)	-0.3418 (0.0922)						
Non-Zombie * Industry Zombie%	-0.0885 (0.0330)	-0.0232 (0.0102)	0.2183 (0.0756)	-0.0852 (0.0333)	-0.0188 (0.0102)	0.2315 (0.0767)	-0.0716 (0.0321)	-0.0128 (0.0098)	0.1980 (0.0770)
Sales growth							0.3490 (0.0176)	0.1404 (0.0073)	0.3123 (0.0256)
Industry dummies?	Yes	Yes	Yes	No	No	No	No	No	No
Year dummies?	Yes	Yes	Yes	No	No	No	No	No	No
Industry*year dummies?	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs.	22,396	22,429	23,090	22,396	22,429	23,090	22,394	22,428	22,847
Adjusted R^2	0.0537	0.0895	0.3599	0.0617	0.1007	0.3590	0.1125	0.1794	0.3705

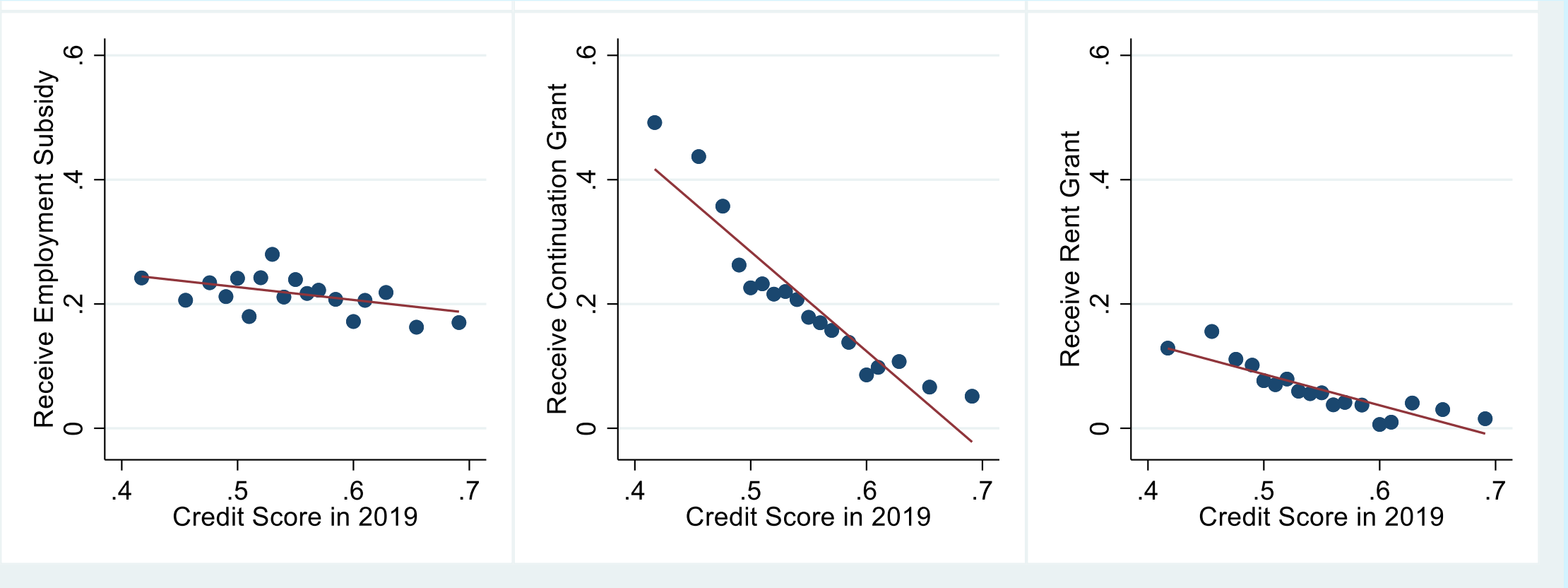
Now has spread to many advanced countries

- Recently, many papers find similar problem of zombies in Europe
  - Müge Adalet McGowan, Dan Andrews and Valentine Millot (2017), "The Walking Dead?: Zombie Firms and Productivity Performance in OECD Countries", *OECD Economics Department Working Papers*, No. 1372.
  - Viral V. Acharya, Matteo Crosignani, Tim Eisert, and Christian Eufinger (2020). "Zombie Credit and (Dis-)Inflation: Evidence from Europe," *NBER Working Paper* No. 27158.

Policies to protect corporations can create zombies

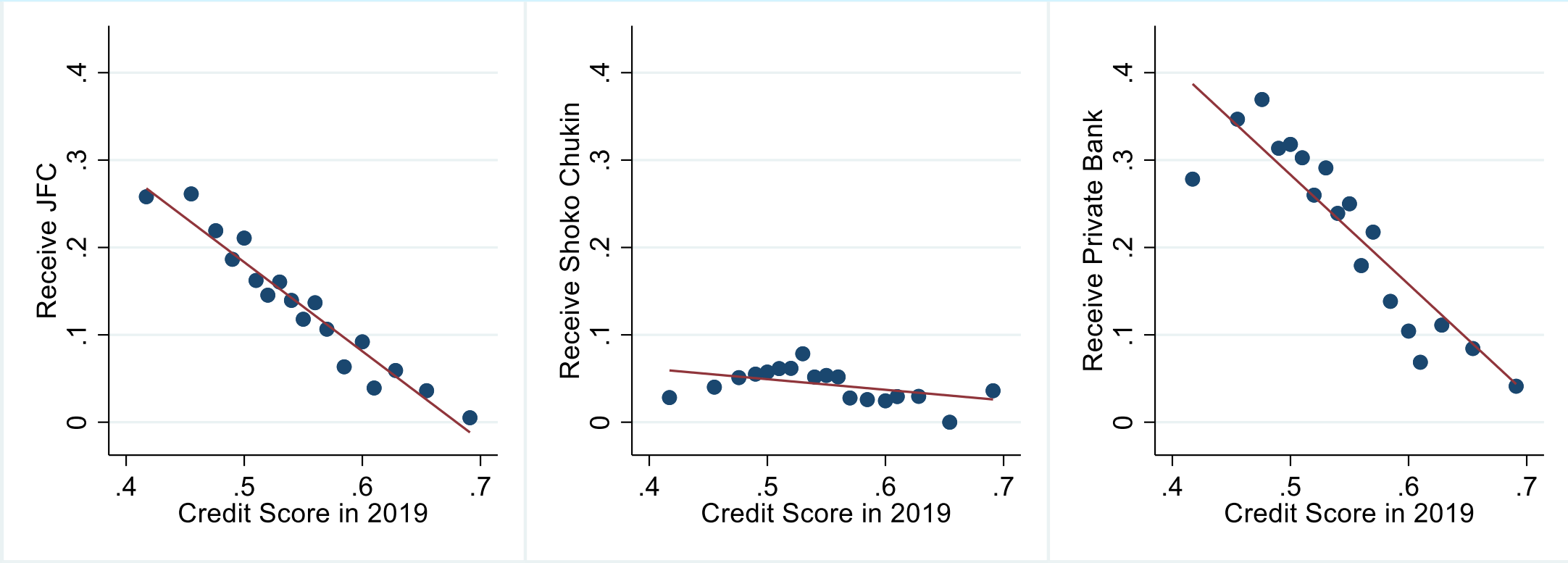
- During the COVID-19, the government protected corporations again (though some direct assistances to individuals were also tried)
- Avoiding too many bankruptcies may be the right response during the crisis, but can impede the adjustment to “New Normal”
- Suggestive evidence that Japan’s government support programs may indeed create zombies: Takeo Hoshi, Daiji Kawaguchi, and Kenichi Ueda (2021). “The Return of the Dead? The COVID-19 Business Support Programs in Japan.”
- Looks at the Survey conducted jointly by Tokyo Shoko Research (TSR) and the University of Tokyo: Find that the companies with lower credit scores were more likely to receive the government supports

Grants/Subsidies and Credit Score



Source: Takeo Hoshi, Daiji Kawaguchi, and Kenichi Ueda (2021). "The Return of the Dead? The COVID-19 Business Support Programs in Japan." Figure 1. Note: The original credit score is divided by 100 in order to calculate the credit score above.

Concession Loans and Credit Score



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Regression Results (Coefficient Estimate on TSR Credit Score in 2019)

Program	Employment Adj. Subsidy	Business Cont. Grant	Office Rent Grant	JFC Loan Concessional	ShokoChukin Concessional	Bank Zero-Zero Loan
Applied	-0.289 ** (0.130)	-0.346 *** (0.108)	-0.174 * (0.090)	-0.803 *** (0.113)	-0.419 *** (0.073)	-0.961 *** (0.132)
Received	-0.174 (0.125)	-0.247 ** (0.108)	-0.071 (0.076)	-0.583 *** (0.108)	-0.339 *** (0.066)	-0.758 *** (0.129)

Source: Takeo Hoshi, Daiji Kawaguchi, and Kenichi Ueda (2021). "The Return of the Dead? The COVID-19 Business Support Programs in Japan." Table 3. N=4199. OLS estimates and heteroskedasticity-consistent standard errors. All specifications include bin dummy variables with 0.1 interval between -1 and 1 of minimum of sales growth between February and September 2020, natural logarithm of sales in 2019, natural logarithm of the number of employees in 2019, sale growth prospect of 2021 relative to 2019, prefecture fixed effects, 2-digit industry fixed effects.

Regression Results just for SMEs

Program	Employment Adj. Subsidy	Business Cont. Grant	Office Rent Grant	JFC Loan Concessional	ShokoChukin Concessional	Bank Zero-Zero Loan
Applied	-0.312 ** (0.136)	-0.355 *** (0.116)	-0.219 ** (0.096)	-0.836 *** (0.122)	-0.472 *** (0.078)	-1.055 *** (0.143)
Received	-0.198 (0.131)	-0.245 ** (0.116)	-0.081 (0.081)	-0.608 *** (0.117)	-0.383 *** (0.071)	-0.835 *** (0.140)

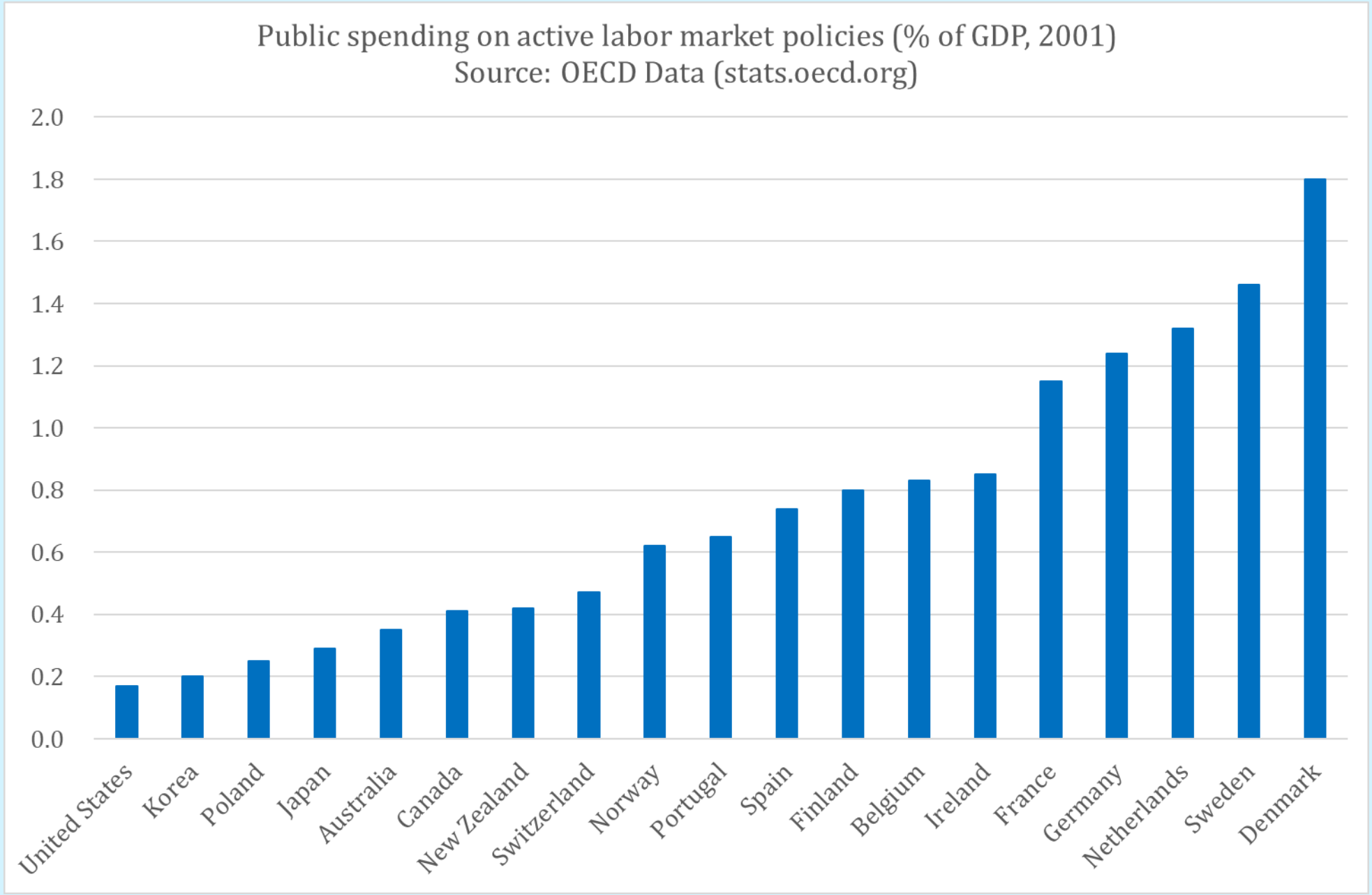
Source: Takeo Hoshi, Daiji Kawaguchi, and Kenichi Ueda (2021). "The Return of the Dead? The COVID-19 Business Support Programs in Japan." Table 6. N=3867. OLS estimates and heteroskedasticity-consistent standard errors. All specifications include bin dummy variables with 0.1 interval between -1 and 1 of minimum of sales growth between February and September 2020, natural logarithm of sales in 2019, natural logarithm of the number of employees in 2019, sale growth prospect of 2021 relative to 2019, prefecture fixed effects, 2-digit industry fixed effects.

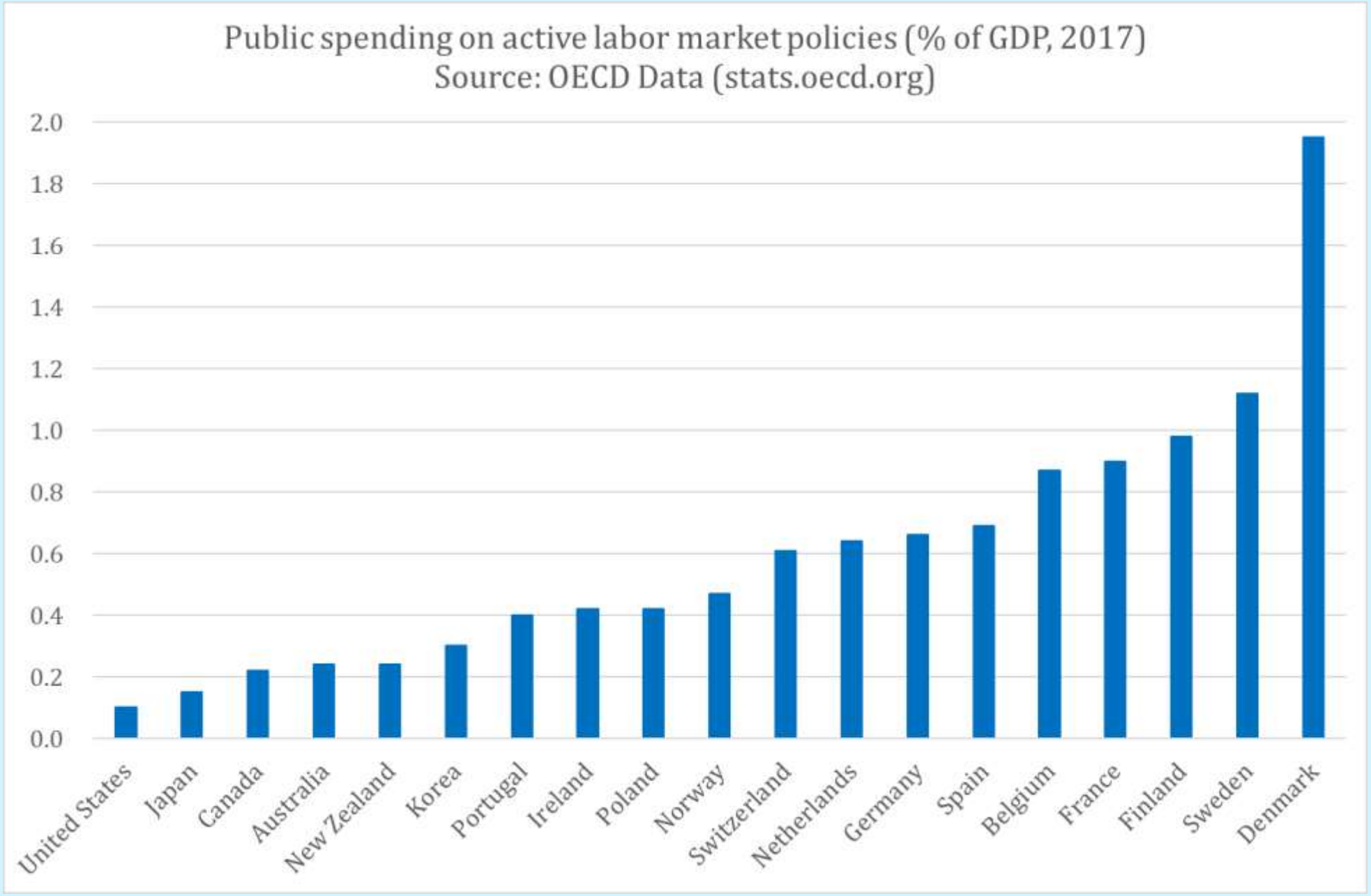
Summary

1. The health impact of the COVID-19 in Japan has not been as grave and the government imposed less restrictions on economic activities compared with other advanced economies. Nonetheless, the Japanese economy suffered almost as much as the other countries.
2. The pandemic has revealed various problems in the Japanese economic system. One of those is the nature of safety net for the workers whose jobs are in danger.
3. Traditionally Japanese government supported the troubled companies so that they can maintain the jobs. This has been the case again during the pandemic.
4. This traditional (and current) policy has two potential problems.
   (i) Protects only workers that are under the lifetime employment system (this is already happening)
   (ii) Can end up protecting zombie firms (this may happen soon)
5. Japan needs new safety net that helps workers directly.

New Safety Net?

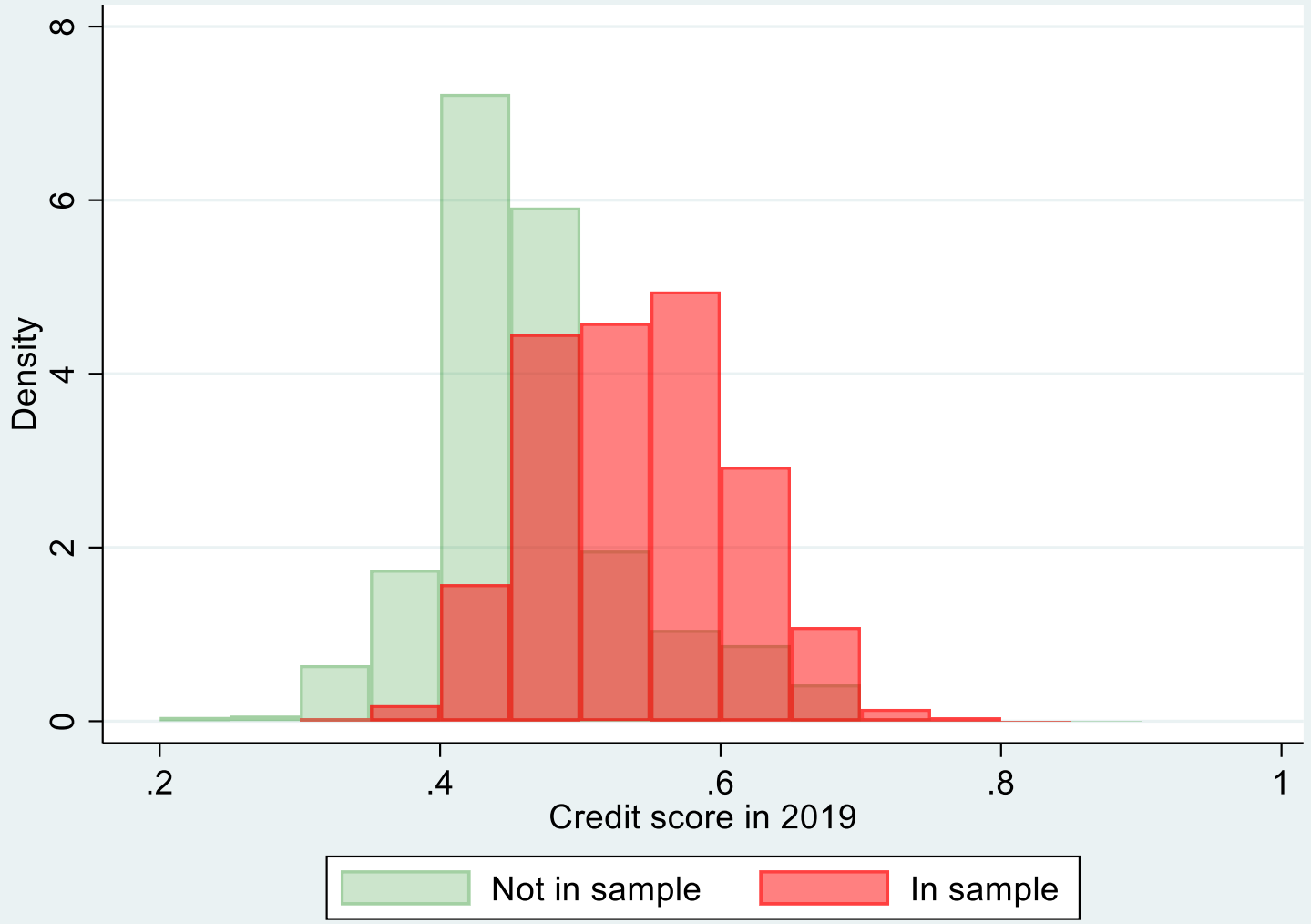
- Rather than protecting corporations and hoping the corporations to protect the employment, **help the workers/households directly**
- More emphasis on those **active labor market policies (ALMP)** which help workers to find new jobs
- **ALMP** help unemployed people back to work. These include:
  - Public job placement services
  - Labor market programs such as training
  - Direct job creation
  - Start-up incentives
  - Employment incentives (including Employment Adjustment Subsidy for Japan)
- Japan spends very little for these policies (even when the Employment Adjustment Subsidy is included)


Public spending on active labor market policies (% of GDP, 2001)
Source: OECD Data (stats.oecd.org)
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
United States
Korea
Poland
Japan
Australia
Canada
New Zealand
Switzerland
Norway
Portugal
Spain
Finland
Belgium
Ireland
France
Germany
Netherlands
Sweden
Denmark


Public spending on active labor market policies (% of GDP, 2017)
Source: OECD Data (stats.oecd.org)
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
United States
Japan
Canada
Australia
New Zealand
Korea
Portugal
Ireland
Poland
Norway
Switzerland
Netherlands
Germany
Spain
Belgium
France
Finland
Sweden
Denmark

Extra Slides

Sampling bias



Source: Takeo Hoshi, Daiji Kawaguchi, and Kenichi Ueda (2021). "The Return of the Dead? The COVID-19 Business Support Programs in Japan." Appendix Figure B1.
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