

An innocent imagination of the “Society 5.0”

—Some tragic consequences of digitalization of bank services in Japan

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1. Japanese Version of “Gesellschaft 5.0”

- 1.1. You can find a chapter “from the money value society to the non-money value society in the Japanese version of *Society 5.0*, which is edited by the H-U Tokyo Lab (Hitachi and U-Tokyo Joint Research), and escorted by the Rector of Tokyo University, Professor *Makoto Gonokami* and the President of Japan Business Federation, the CEO of Hitachi (multinational conglomerate company) *Hiroaki Nakanishi*.
- 1.1.1. Of course, they are typical Japanese elites! However, I think that they mention on a very innocent future on Japan.
- 1.2. I believe that most of ordinary Japanese will have to be confronted with much more serious tragedies in future.
- 1.3. The elites say, “To buy an encyclopedia by paying money is an economic activity in the money society. On the other hand, to look up something with using gratis *Wikipedia*” is an economic activity in the non-money society”.¹
- 1.3.1. Is that true? This explanation might be true, only under a certain necessary condition. If everyone has always her/his own smartphone or internet connected computer, such an innocent future may be possible. Realistically the smartphone may be built in our human body in future, but I believe that such the case will not be true of everyone in Japan.
- 1.3.2. The Hitachi may gain a tremendously big profit by selling their data analytics service, transportation system, exporting the nuclear power plants to Europe and Asia.
- 1.3.3. But I don’t believe that the Hitachi intends to supply all Japanese gratis with various online provider services?
- 1.3.4. Even if the Hitachi were a very generous and liberal company, Japan must be totally and completely provided with free Wi-Fi services. Who could make it so generously? The Japan Business Federation, or the Liberal Democratic Party, or our Japanese Government?
- 1.3.5. No, it will be impossible!



2. New Version of ‘Historical Materialism’?

- 2.1. ‘The Society 5.0’ is expressed as ‘super-smart society’(?), ‘cyber physical system society’(?), or ‘non-money value society’ etc.
- 2.2. They say, “The Society 1.0 is the hunter-gatherer society, the Society 2.0 is the agrarian society, the Society 3.0 is the industrial society, the Society 4.0 is the information society.” The

¹ 日立東大ラボ『Society 5.0 人間中心の超スマート社会』日本経済新聞社 2018 年、p.220.

Society 5.0 is imagined to be appearing out after this sequence.

- 2.3. Such a developmental model seems to be a popular, or vulgar analogy of Marxian historical materialism. According to his famous book *Zur Kritik der Politischen Ökonomie* (1859), this developmental model is presented as a sequence of 'asiatische', 'antike', 'feudale', 'modern bürgerliche' Produktionsweise (*MEW* Bd. 13, S. 9f.).
- 2.4. Marx firstly interested in the modes of production (Produktionsweise).
 - 2.4.1. In other words, the society is, in his theoretical context, an institutional or ideological formation, which is decided by the 'mode of production.'
 - 2.4.2. It is well-known as the model of 'base and superstructure'.
 - 2.4.3. The authors of the *Society 5.0* also believe that each economic basis should decide on its societal formation.
 - 2.4.4. They suppose the basis as a combination of technological and productive capacity.
 - 2.4.5. Very interestingly they follow the historical materialism, as if they were very ardent Marxists.
 - 2.4.6. Of course, they were not any Marxists. They will never mention on the serious contradiction between the productive relations and the productive forces in the future society of Japan.
 - 2.4.7. Unhappily they are engineers. They have their own interests only in the technological trend of 'productive forces.'
- 2.5. I would like to cast light upon some difficulties of 'productive relations', namely the serious latent class conflict, which particularly most of ordinary older Japanese will be sure to come up against, under the Society 5.0, which the brilliant engineers have projected.

3. 'Money' as medium

- 3.1. The banking inclusive of the postal savings is a typical business to sell and buy moneys and its derivatives as commercial business
- 3.2. We could agree with the authors of the *Society 5.0* that the cashless exchange through the computer network has rapidly come into wide use not only in the professional settlement of accounting but also in our personal paying.
- 3.3. The card device like credit card, debit card, electric parcel etc. has come into wide use. Most of us may very easily use the internet banking. In near future in Japan also the facial recognition system, the finger vein recognition system etc. may become popular for our paying
 - 3.3.1. Of course, we have known lots of cashless tools like 'bill', 'check' etc. for a very long time.
 - 3.3.2. Certainly, today's cashless activity is a new one. But it is never any non-money value economy.
- 3.4. The cash is supposed as printed papers or coined metals. But paper and metal have always been only media since the King of Lydia *Croesus* in 500s BC.
 - 3.4.1. In case of gold coin also this gold has always been only a medium.
- 3.5. In other words, it means that such the media (like gold, silver, nickel, aluminum or paper, bamboo in ancient China, shell in the islands in the southern Pacific Ocean, tabaco in old north America and so on), which transmit from one point to another point, have evolved itself

to various electric signals and new materials

- 3.6. I emphasize that the money is a symbolic medium, and this medium is functioning through various basic material media. Scientific and engineering experts will be able to find and invent more various new media.²
- 3.7. A word of 'digital currency' is used in Japanese version of *Society 5.0*. It should be also supposed as a combination of electric signals and a certain material of transmitter.
- 3.8. Of course, such the 'digital currency' can used and will be valid over political geographic national borders.
- 3.9. If they could innovate such a technology as able engineers, the productive forces would be inevitably evolved and enlarged over all national borders.

4. Nationalization or De-Nationalization?

- 4.1. However, it is very interesting that these Japanese authors prefer the '*MUFG-coin*' by the Mitsubishi UFJ Bank or the '*J-coin*' by the Mizuho Bank to the imaginary currencies like *Bitcoin* (ibid., p.225).
- 4.2. Indeed, they are all designed and issued by the technique of blockchain etc. But Japanese version '*MUFG-coin*' and '*J-coin*' are provided by their concerned banks. They are supposed to be exchanged with Japanese Yen in a certain fixed rate.
 - 4.2.1. If they were so, there is not any difference between these coins and various credit cards.
 - 4.2.2. For instance, I order a book to amazon.de, and I use my credit card for this paying with Yen. The amazon.de receives my payment with Euro. This settlement of accounts is secured by the formal relation between the European Central Bank and the Bank of Japan.
- 4.3. In case of the *Bitcoin* or some imaginary currencies, the providers of this coin are theoretically innumerable anonymous miners, who are participated in mining and proving on the autonomous peer-to-peer computer network.
 - 4.3.1. The '*MUFG-coin*', the '*J-coin*' are used on their own server-client networks. It means, these 'digital currencies' are only something like loan bond or bankbook, which each bank has issued with printed paper until today.
 - 4.3.2. The most characteristic point of *Bitcoin* is that it is issued anonymously, and its paying is proved anonymously.
 - 4.3.3. The validity of such the imaginary currencies is secured by various competitions between currencies, namely many imaginary currencies and some main national currencies.
 - 4.3.4. In future these imaginary currencies may be valid without any formal national currencies. I believe that we don't need any central banks someday.
- 4.4. This is a practice of denationalization of money.³ I believe that this will be a possible reality of

² Mototaka Mori, „Person als Medium – Eine pragmatisch-phänomenologische Alternative zur Systemtheorie“, in: Joachim Renn, Gerd Sebald, Jan Weyand (Hrsg.), *Lebenswelt und Lebensform: Zum Verhältnis von Phänomenologie und Pragmatismus*, Velbrück/Frankfurt am Main 2012, S. 192-205.

³ Friedrich von Hayek, „The Denationalization of Money: An analysis of the Theory and Practice of Concurrent Currencies“, in: *The Collected Works of F.A. Hayek*, Routledge/London, pp.128-229.

competitive currencies by Friedrich von Hayek, although he could not know any internet.

4.4.1. I think that the national border or the national currency is old-fashioned and very anachronistic.

4.5. Therefore, the *Society 5.0* looks like to be supposed as ‘a very domestic project’, namely ‘the socialism in single country.’ But it may be a kind of ‘Stalinism.’

4.6. I propose that the prospect entrepreneur in Japan should be mobile beyond borders.

4.6.1. I doubt whether the Japanese Yen will be able to keep its today’s position in the world economy twenty years later. I doubt whether the bank of Japan, which is the central bank of Japan, will be existing.

5. Disappearance of “face-to-face” space-time

5.1. The *Society 5.0* is supposed as a humanistic smart society. However, the digitalization by technology relies upon the state or the government. In my impression, it is a kind of etatism or state-nationalism.

5.2. How does the practice of cashless make our human life happy?

5.2.1. Of course, if tremendously many kinds of digital equipment are produced and sold, the Japanese electric producers like *Hitachi* will be happy.

5.2.2. The board members in the mega banks in Japan may be happy as an introduction of efficient business system.

5.2.3. However, I doubt whether lots of business persons in banks can be happy.

5.3. Japanese banks inclusive of postal savings have had so many branches (Table 1). It may be a peculiar feature.

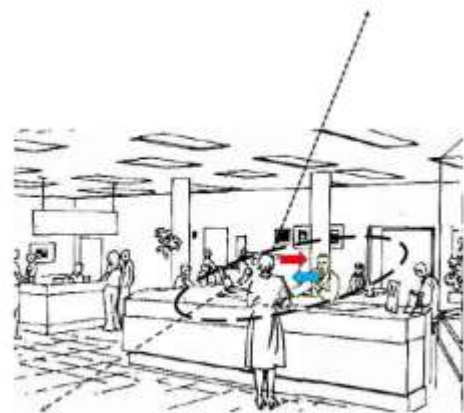
5.3.1. It means, the face-to-face relation between a bank clerk and a customer, which secures a very intimate space and time over the counter, has contributed to a very high propensity to save in Japan.

5.3.2. “Gift presented to all customers.” If you make a deposit in a bank or savings in a postal office, it was natural twenty years ago.

5.3.3. Particularly savings in lots of postal offices in small local towns formed a communicative space-time dimension.

5.4. Most of ordinary Japanese have been making efforts to do savings for their own old life and their children for a long time almost since the Meiji era.

5.4.1. The postal savings and the small banking services in local areas have playing a very



Bank Counter Space-Time

Table 1. Number of Branches (Mega-banks & Postal Savings Bank)

	2010	2018
Mitsubishi-UFJ	632	654
Mitsui-Sumitomo	478	490
Mizuho	416	447
Postal-Savings	24,185	24,019

*from: Japanese Bankers Association

important roll for their own lives and the national treasury.

- 5.5. If you could observe an allocation of clerks in a branch of bank in relatively large cities twenty years ago, you could understand that they were lined two deep behind the first counter line.
 - 5.5.1. Today, there is only one line of counter, because one clerk on the counter can deal with his customer using his high performative computer.
 - 5.5.2. As a result, every mega bank company in Japan don't need any more ordinary bank clerks. Such the excess personnel had to move to other jobs in the same bank or in the other world.
 - 5.5.3. Of course, the Internet banking has accelerated this trend of reducing personnel very much.
 - 5.5.4. Every mega bank company has begun to restructure their own organization very radically. The Mitsubishi UFJ Financial Group is planning to reduce its work-force by 9,500 men before the end of 2024. It means that about 1,350 men are reduced every year. The Mitsui-Sumitomo FG is planning to reduce its work-force by 4,000 men before the end of 2021. The Mizuho FG is planning to reduce 19,000 employees before the end of 2026.⁴
 - 5.5.5. They have been reorganizing and liquidating many of their branches. Any branch can be very easily replaced with unmanned cash dispenser devices or internet banking system. The Mitsubishi UFJ FG announced to close 180 branches before the end of 2023. The Mizuho FG is planning to close 130 branches of its total 500 branches before the end of 2024.⁵
- 5.6. An intimate space and time over the counter also are replaced with a quasi-intimate push and response relation with touch panel.

6. Paradox of Savings?

- 6.1. The digital money like the 'MUFG-coin', 'J-coin' etc. and the internet banking could make us possible most of services of deposit or savings, and loan or lending without any manned branches.
 - 6.1.1. Someday the digital money may drive out bank notes and coins as cash in Japan.
- 6.2. Traditionally the rate of savings in Japan had been very high, but it has been rapidly decreasing since these 20 years.

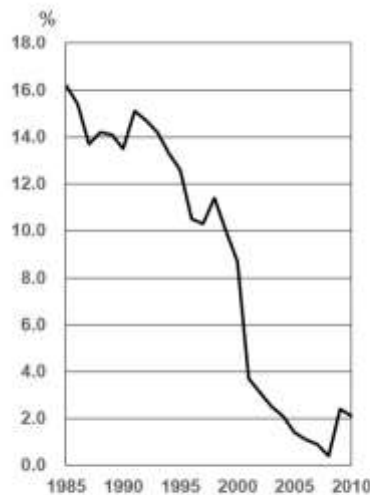


Fig. 1a: Rate of Saving of Household

* The Author made it from the long-term Economic Statistics (Cabinet Office)

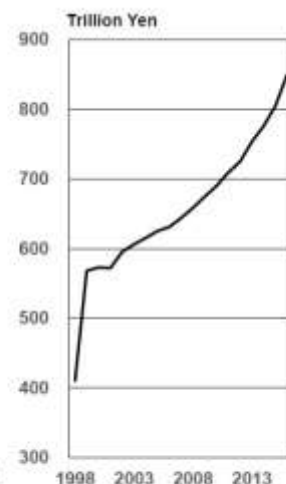


Fig. 1b: Transition of Saving Amount

* The Author made it from the Bank Account Balance (Bank of Japan)

⁴“[Restructuring in Mega-Banks](#)”, in: *Diamond Online*, Nov. 29, 2017.

⁵ *Nihon Keizai Shinbun*(morning), May 21, and 22, 2019.

6.2.1. However, the amount of savings is increasing, because the population of old aged people is increasing.

6.3. How could we understand such trends? (Fig. 1a & 1b).

6.3.1. *Max Weber* showed us 'eine innere Verwandtschaft zwischen Askese oder kirchlicher Frömmlichkeit und kapitalistischen Erwerbsleben'.⁶

6.3.2. *Robert N. Bellah* would find out its counterpart in Japan. *Baigan Ishida* and 'Shingaku'.⁷

6.3.3. Do you think that the increasing of savings amount (Fig. 1b) is an unintended consequence of the ethic of *Shingaku* and the capitalistic spirit in Japan?

6.4. No, it's not correct.

6.4.1. Firstly, the high rate of savings in Japan has been caused by its incomplete social welfare.

6.4.2. In other words, every Japanese has anxiety and concern on her/his own future, particularly on her/his own old age.

6.4.3. If you break down the amount of savings by the age group (Table 2), you could understand such a social meaning.

Table 2: Saving Percent of Household Income by Age Group (2018)

	Saving Amount (S) (million yen)	Annual Income (A) (million yen)	S / A (%)
Under 39 years old	6.00	6.19	96.9
40 - 49 years old	10.12	7.56	133.9
50 - 59 years old	17.78	8.60	206.7
60 - 69 years old	23.27	5.69	409.0
Over 70 years old	22.49	4.22	532.9
Average	17.52	6.22	281.7

* The Author made it from the Household Research (Cabinet Office).

* Over 2 persons' household. Except single person's one.

6.4.4. Their main motivation to saving is understood as forming their own funds for their old age.

6.5. Secondly, because the older population has very rapidly increased. Many of them have just finished their saving. Most of them are pensioners now. They will not save any more (Table 3).

Table 3: Japanese Population by Age Group

	2017(million)		1995(million)
0 - 9 years old	10.16	21.587 million	12.54
10 - 19 years old	11.43		16.04
20 - 29 years old	12.52	60.876 million	18.68
30 - 49 years old	15.00		15.95
40 - 49 years old	17.61		19.62
50 - 59 years old	15.75	42.955 million	16.88
60 - 69 years old	17.73		13.87
Over 70 years old	25.23		11.87
			28.572 million
			71.130 million
			25.736 million

* The Author made it from the Household Research (Cabinet Office).

7. Is a New Idea of 'Money' possible?

7.1. Many old aged persons have just received their retirement allowance or their companies' own

⁶ Max Weber, "Die protestantische Ethik und der Geist des Kapitalismus", in: *Gesammelte Aufsätze zur Religionssoziologie*, Tübingen 1978, S.25-6.

⁷ Robert N. Bellah, *Tokugawa Religion*, Boston 1957.

pension, because they have ordinarily been the white-collar employee of the life-long employment system.

- 7.1.1. They have been working with relatively low salary from early morning till late night for 35 to 40 years.
- 7.1.2. The retirement allowance or the companies' own pension means only the relayed paying, which they had to get in their active aged life.
- 7.1.3. Such the lifelong employment system is coming to an end now.
- 7.1.4. Nobody knows whether the next generation, which are the ordinary salary persons from 30 to 40 years old age group today, could get the same social welfare as the older generation.
- 7.2. Very ironically, on the other hand, total amount of their savings by the over 65 years old persons has been maintaining today's economic system in Japan.
- 7.2.1. The governmental debt has already amounted to over 100 billion Yen. It means ten times one-year national budget.
- 7.2.2. But the total sum of bank deposit and postal savings is much bigger than this national debt.
- 7.2.3. Lots of private banks in Japan had ever bought the governmental debt as the national bond.
- 7.2.4. They could do it by large deposits and savings from the ordinary people and companies.
- 7.2.5. The governmental debt had been supported firstly by lots of private banks and lastly by the ordinary people.
- 7.3. Since the *Abenomics*, which has begun by the *Shinzo Abe* Cabinet II, the bank of Japan has been adopting the very low interest policy.
- 7.3.1. Now, the Bank of Japan is directly buying the national debt and some specific investment trusts. The private banks have begun to release their national bond reserves (Fig.2).
- 7.3.2. Soon the governmental debt can be supported only by the central bank itself.
- 7.3.3. According to the classic economic theory, it may be very dangerous.
- 7.3.4. The Bank of Japan issues all kinds of note of Yen. A tremendously big governmental debt is supported by these printed papers. Debts are bought by papers.
- 7.3.5. Yes, it may be a kind of cashless relation.
- 7.3.6. Perhaps the digitalization may make possible the balance sheet of National Treasury itself

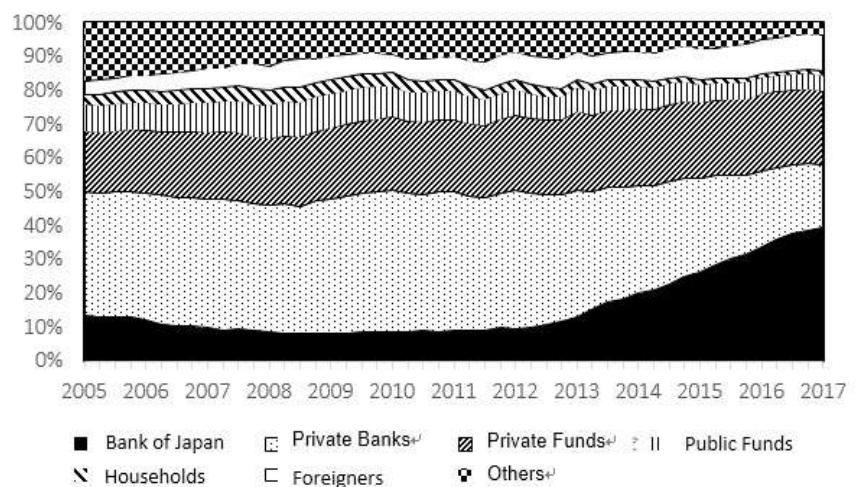


Fig 2. Possessors of National Bond

* The Author made it from the Flow of Funds Statistics (Bank of Japan).

as 'money'.⁸

8. Japan is neither India nor Sweden.

- 8.1. In the end of 2016 Indian Prime Minister *Narendra Modi* banned the country's largest currency bills. This execution was instantaneously, because his society has relied on cash to pay and to avoid taxes.
- 8.2. The national identification program has come into wide use very rapidly since 2009. It is known as the Aadhaar project. Already 1.3 billion persons have registered in this system.
- 8.3. The similar system (my number system) has begun since 2016 in Japan. Until the end of 2018 about 14 million persons registered in it. But it means only 11% of total Japanese.
- 8.3.1. It means, there are many possible methods to confirm and check verify the personal identification. Since the Meiji era the family registration, resident registration etc. have been already and perfectly institutionalized.
- 8.4. China, India or many countries in Africa, such the rapid industrialized and newly high consumption society will be relatively easily digitalized, because they don't have any old-fashioned institutions, customs and consciousness.
- 8.5. Of course, I know an instance of digitalized cashless society in Sweden as an example of advanced economic society.
- 8.5.1. However, the population of Sweden is 8 Million. Japanese population is 120 Million still now, and 40 Million is over 65 aged persons.
- 8.5.2. In Sweden the social welfare policy had been accomplished since *Olof Palme* or *Gunnar Myrdal*. The minimum social services have been fully equipped.
- 8.6. However, very regrettably nobody knows how we could and should do with 40 Million old aged persons in Japan.
- 8.6.1. In case of Japan, such the institutions, customs and consciousness must be demolished before the digitalizing projects. However, it will be very difficult and tragic.
- 8.6.2. I wonder whether most of over 80 years old persons inclusive over 4 million senile dementia patients will want to use any digitalized cash dispenser or internet banking.
- 8.6.3. Therefore, there is ironically a very good demand for the safe in Japan. This is not any cashless society, but 'cash love society.'
- 8.6.4. It will be very fantastic that the new designed bank notes of Yen are decided to be introduced in the first half of fiscal year 2024.
- 8.7. How long is this ridiculous reality continuing in Japan?
- 8.7.1. The household, where the old aged person lives alone, or the old husband and wife live, have been often robbed, and have fallen a victim to lots of criminal affairs of swindle or robbery like various 'multi-level marketing', 'ore-ore-fraud', "appointment-telephone-robbery'.
- 8.8. This is an aspect of difficulties of 'productive relations', namely the serious latent class conflict in Japan today.

⁸ Stephanie Bell, "The role of the state and the hierarchy of money", in: *Cambridge Journal of Economics*, 2001, 25, pp.149-63.