

Institutions, Policies, and Growth in Postwar Japan

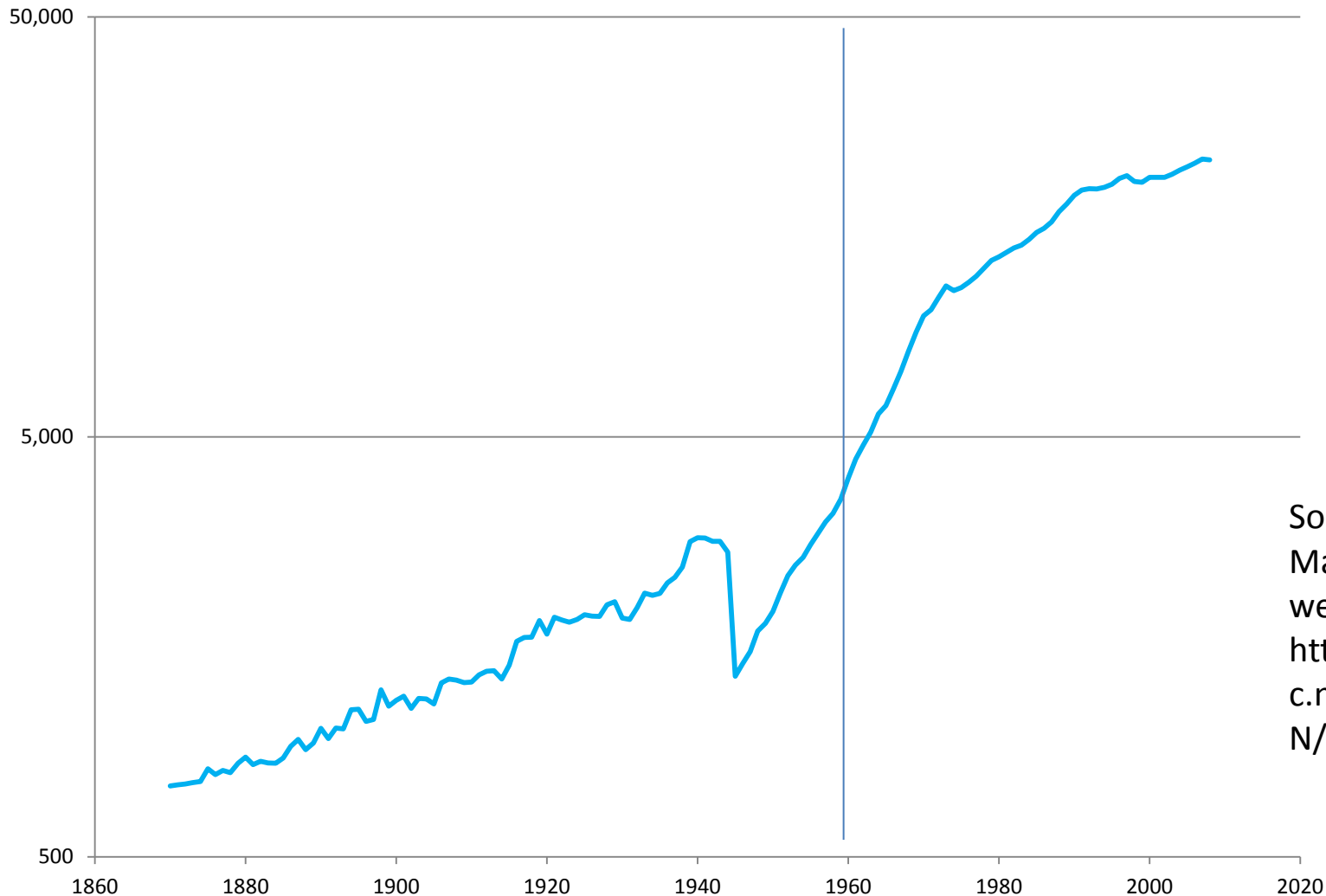
October 17, 2015

Tetsushi Sonobe

National Graduate Institute for Policy
Studies (GRIPS)

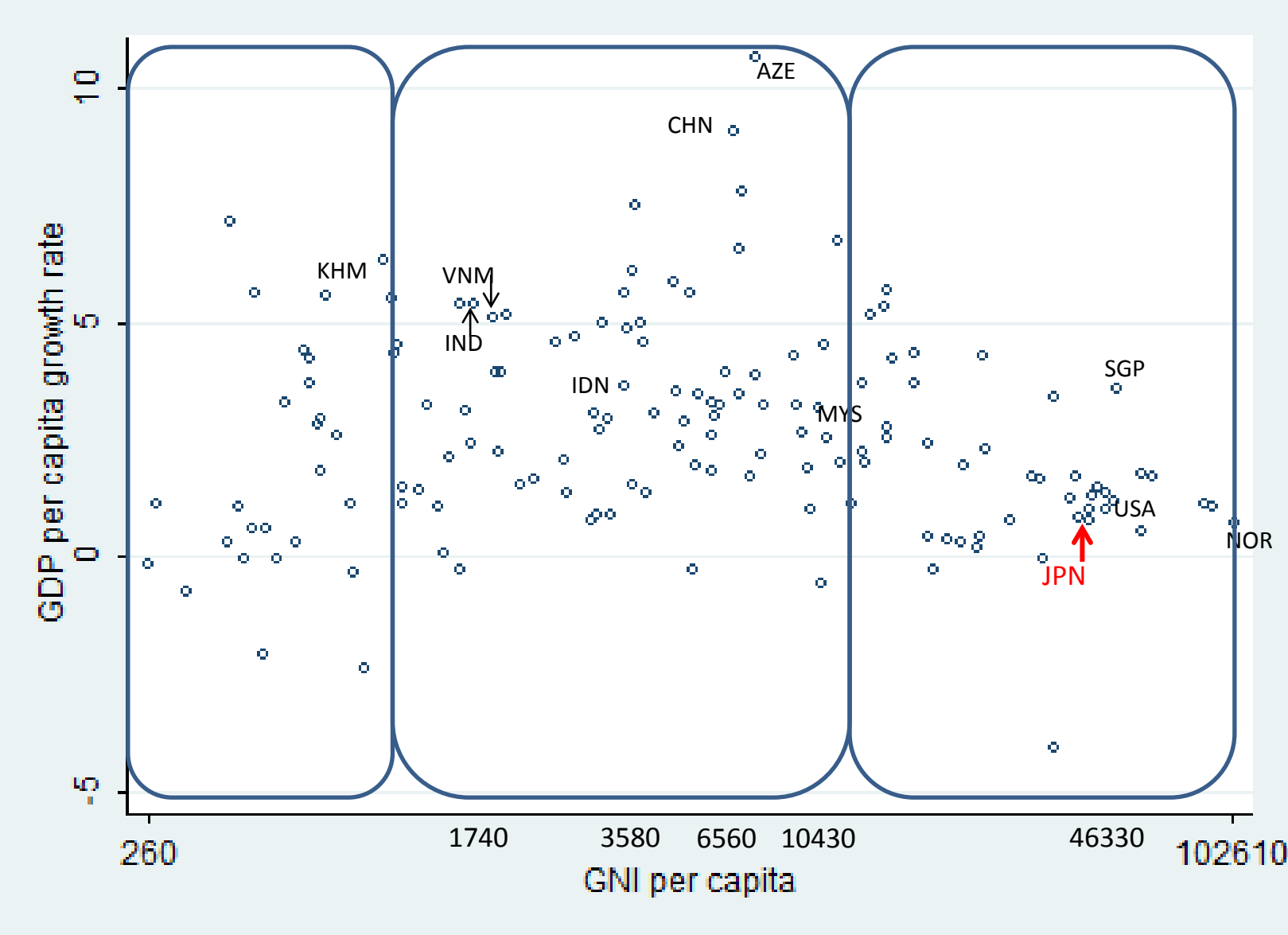
Japan's Economic Growth, 1870 – 2008

(Real GDP per capita in constant US dollars)

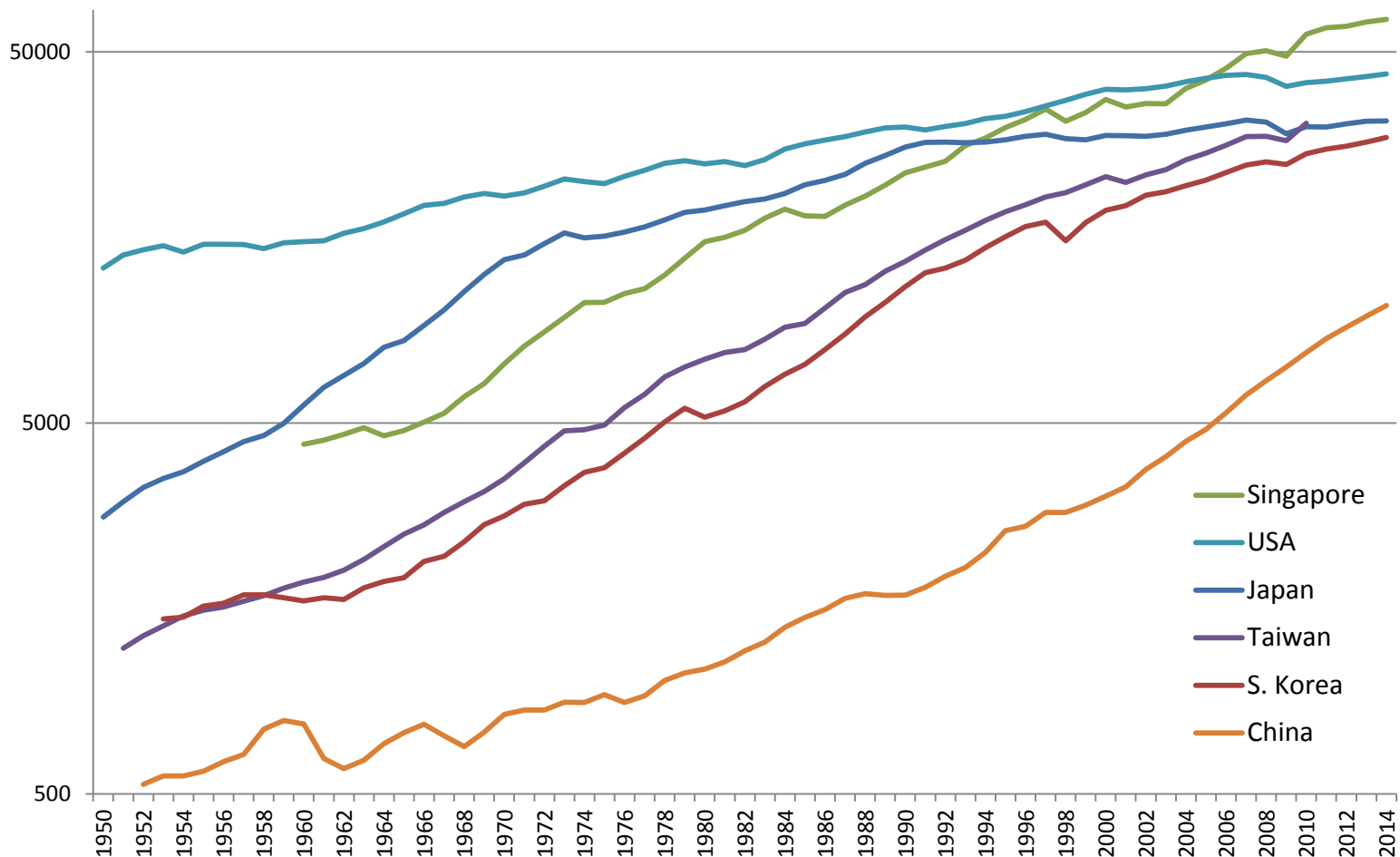


Source: Angus Maddison's website, <http://www.ggdc.net/MADDISON/oriindex.htm>

GNI per capita in 2013 (horizontal axis) and the average GDP per capita growth rate, 1999-2013 (vertical axis)



Economic Growth of the High Income East Asian Countries and USA



Japan's experience demonstrates

- that institutions (as organization or the rules of game) do matter to growth performance,
- that the rules of game change over time (they can be viewed as endogenous equilibrium outcome),
- that the political and economic institutions that were formed in the 1950s helped Japan achieve the High Growth in the 1960s and 1970s,
- but that the resulting socio-economic development forced even those institutions which seemed to exemplify the “Japanese style” or “Japanese culture” to change drastically in the 2000s and the 2010s.

	Stage	Growth	Within firm	Economic policy	Business to government	Political
45 50s	Dual economy (large firms vs. small firms & farmers)	Recovery	Strong trade unions	Command economy	Political decades	Multiple member districts
			Productivity movement	Market economy (1949)		
60s 70s		High growth	Lifetime emp. Seniority Main bank Convoy	Location act Income doubling	Iron triangle (diet members, large firms, & bureaucrats)	LDP long lasting admin
		Steady growth	Cross-share Weak unions SME Kaizen	Agri. and declining ind. protection	Deliberative councils	
80s 90s	No longer dual	Bubble Its burst		Deregulation Privatization		Election system reform
	Catch-up almost completed	Behind in IT No growth	Emphasis on corporate governance		Iron triangle softening	
00s	Large debt Low birthrate Aging pop. Inequality	No R&D No training No growth	J. System deteriorating	Koizumi reform	PMO initiative	Median voter
				Child allowance	DPJ admin.	
10s		Sluggish growth		ABEnomics Growth strategy		

Coordination problems in the '50s and '60s

1. Trilemma among industries: under-investment
2. Workers reluctant to productivity improvement
3. Huge congestion in the four major industrial areas

1. E.g. Trilemma among the steel, coal, and shipbuilding industries

- High price of steel impeded machinery export;
- Inefficient steel production ← small production size ← high prices of coal and iron ore;
- High price of iron ore ← high freight cost ← the shortage of ships;
- Low production capacity of coal ind. ← pessimistic forecast of coal demand

	Industry B expands	B does not
Industry A expands	Good eq.	
A does not		Bad eq.

Deliberative councils

- Almost every ministry had a few or several “deliberative councils,” which consist of representatives of interest groups (such as industrial associations and companies, farmer groups, etc.), academicians, and journalists.
- The purpose was to “quickly incorporate rich local information scattered around the industries into the government policy” (Aoki).
- This decentralized system worked well when industries did not have serious conflicts of interest.
- The most famous deliberative council was Industrial Structure Council (産業構造審議会) under MITI, which had 500+ members.
- An obvious disadvantage of this device for policy formulation is that it made difficult for radical policy against the vested interest under its jurisdiction to be drawn up and implemented (Okazaki).

Productivity movement

1. Dr. Deming brought statistical process control and quality control to Japan in 1947. Dr. Juran visited Japan in 1954.
2. Business leaders understood that productivity improvement was the only way to resurrect the economy.
3. Japan Productivity Center (1955)
4. Labor unions suspected the negative effect of productivity improvement on employment. They were influential in those days.
5. To persuade them, large firms as well as JPC invented bottom-up approaches to productivity improvement.
6. *Kaizen* is the cream of these approaches that break ice among workers and
 - managers, so that everyone in a firm adopt new technologies continuously.
 - The spread of *Kaizen* among large firms laid a foundation for adopting and assimilating advanced technologies borrowed from abroad.
 - It took more than a decade for SMEs to start adopting *Kaizen*.

If everyone in your workplace adopts a new technology at cost of 10, the employer promises to increase salary by 20 per worker (and still makes profits)

	Colleague adopts	He does not
You adopt	(10, 10)	(0, -10)
You do not	(-10, 0)	(0, 0)

INCOME DOUBLING PLAN (1960)

TRIPLED INCOME IN 10 YEARS

Congestion problems in the four major industrial areas

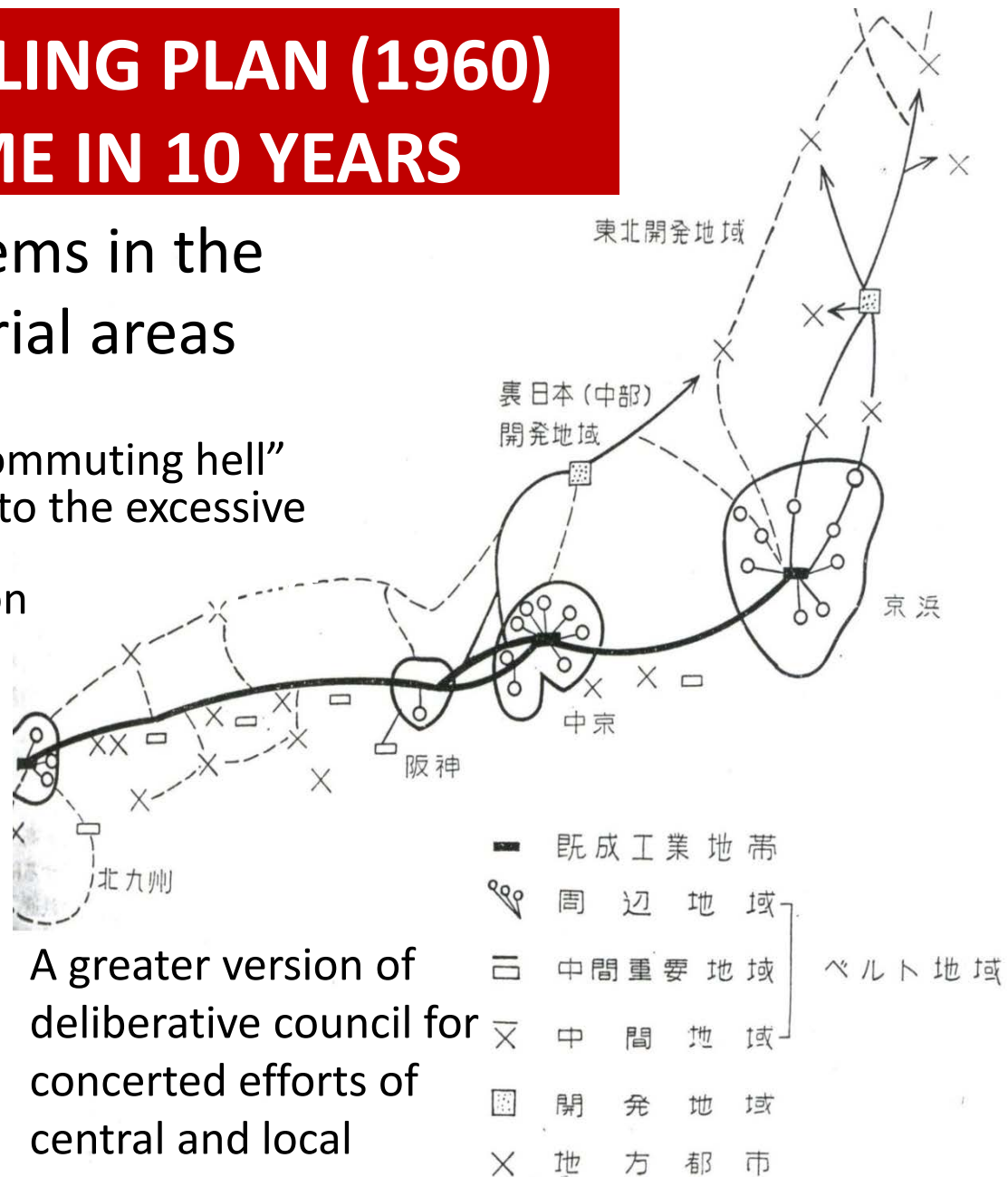
- Traffic jam
- Train congestion – “commuting hell”
- Land subsidence due to the excessive use of groundwater
- Air and water pollution

Solution

Infrastructure investment

- to expand the existing industrial areas
- to create new industrial areas between existing ones.

- A greater version of deliberative council for concerted efforts of central and local governments and business communities



Declining industry protection & Agriculture protection

- **Economic development** → Soaring wage rates and labor shortage since the late 1960s.
- Many labor-intensive industries **lost comparative advantage**
- Due to the oil shocks, the industries producing key materials became weak, too.
- **MITI protected** these industries by providing low-interest loans, tax treatments, giving exemption from the competition law.
- Similarly, **Ministry of Agriculture** protected farmers. **JA** cooperatives' strong lobbying. (JA is exempted from the competition law.)

Japanese system established

1. Japanese management culture

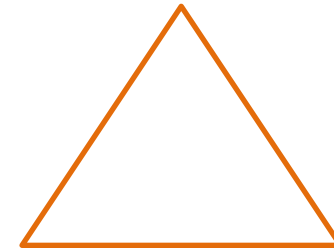
- Lifetime employment
- Seniority promotion
- Main bank system
- Cross-share holding

2. Iron Triangle

- Compared with the US version, triangles in Japan were specialized in particular policy areas and hence many in number and small.

3. LDP traded subsidies to backward sectors and their votes

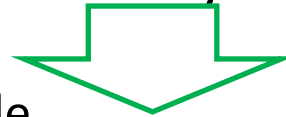
Politicians



Bureaucrats

Interest group

• These elements of the Japanese system were mutually reinforcing.



- Inefficient but equal and stable.
- City dwellers working for large firms, who did not directly benefit from the dole-out pork-barrel politics, were not opposed to them because their incomes were increasing because of the economic growth.
- LDP managed to command legislative majority for many years.

	Stage	Growth	Within firm	Economic policy	Business to government	Political
45 50s	Dual economy (large firms vs. small firms & farmers)	Recovery	Strong trade unions Productivity movement	Command economy Market economy (1949)	Political decades	Multiple member districts
60s 70s		High growth Steady growth	Lifetime emp. Seniority Main bank Convey Cross-share Weak unions SME Kaizen	Location act Income doubling Declining industry & agri. protection	Iron triangle (diet members, large firms, & bureaucrats) Deliberative concils	LDP long lasting admin
80s 90s	No longer dual Catch-up almost completed	Bubble Its burst Behind in IT No growth	Emphasis on corporate governance	Deregulation Privatization	Iron triangle softening	Election system reform
00s	Large debt Low birthrate Aging pop. Inequality	No R&D No training No growth	J. System deteriorating	Koizumi reform Child allowance	PMO initiative DPJ admin.	Median voter
10s		Sluggish growth		ABEnomics Growth strategy		

External shocks and stable equilibrium

- Oil shocks
- Nixon shock
- Trade conflicts with US in the '70s, '80s, and '90s
- Deregulation in the energy, transportation, telecommunication, and finance sectors gained momentum in the UK, US, etc. in the '70s
- Conflicts not only in tradable goods sectors but also in financial sector
- Japan bashing by the US Congress and the Clinton administration

Nonetheless,

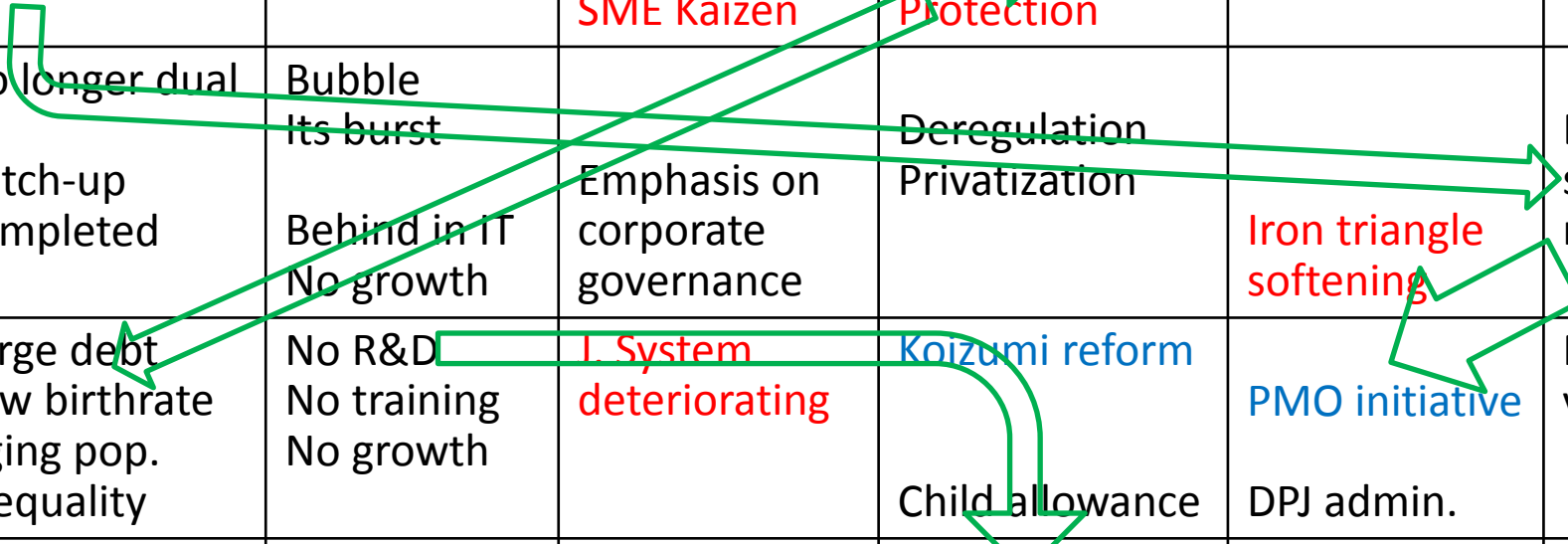
- The Japanese system remained unchanged until the early '80s.
- Then, deregulation started. Privatization, too.
- But very very slow.

This persistence suggests that the system was a stable equilibrium.

Endogenous change took place in the '90s & '00s

1. The dual nature of the economy disappeared
 - The support base for LDP, that is, rural population, became small. Instead urban floating or swing votes increased
 - **Electoral system reform in 1994**: single member districts and proportional representation. → To attract the median voter, politicians have to pay attention to efficiency → pork-barreling became difficult.
2. Completion of technological catch-up
 - Opportunity to imitation became small. Economic growth slowed down → The maintenance of seniority promotion and even lifetime employment became difficult.

	Stage	Growth	Within firm	Economic policy	Business to government	Political
45 50s	Dual economy (large firms vs. small firms & farmers)	Recovery	Strong trade unions Productivity movement	Command economy Market economy (1949)	Political decades	Multiple member districts
60s 70s		High growth Steady growth	Lifetime emp. Seniority Main bank Convey Cross-share Weak unions SME Kaizen	Location act Income doubling Declining industry & agri. Protection	Iron triangle (diet members, large firms, & bureaucrats) Deliberative councils	LDP long lasting admin
80s 90s	No longer dual Catch-up completed	Bubble Its burst Behind in IT No growth		Deregulation Privatization		Election system reform
00s	Large debt Low birthrate Aging pop. Inequality	No R&D No training No growth	L. System deteriorating	Koizumi reform Child allowance	PMO initiative DPJ admin.	Median voter
10s		Sluggish growth		ABEnomics Growth strategy		



Left behind in the IT Revolution

- In 1990, the Japanese TFP was 90 % of the US TFP. GDP per capita was also close. The Japanese economy could have grown at the same pace as the US economy if not faster.
- But the Japanese economy did not grow at all in the next two decades while the US economy grew.
- Why? Because of the bubble burst?
- Equally or more importantly, Japan was left behind the IT Revolution, from which the US economy benefited.
- At least, a part of the reason was the shortage of IT infrastructure: In 1997, communication fee for the exclusive circuit in Tokyo was 4.7 times as high as that in NYC.
- Why? MITI and MPS indulged in fighting for initiative in IT industry promotion. They failed to recognize how important it was to draw up and implement a consistent policy quickly.
- The deliberative council system (or bureau-pluralistic approach) can get opinions of incumbent but no opinions of potential innovators/entrepreneurs.

Further reforms

- No economic growth
- Accumulated inefficiencies due to the dole-out pork barrel politics
- Aging population → pension and healthcare ↑
- ➔ Public finance difficulties

- ➔ Calls for further and further reforms

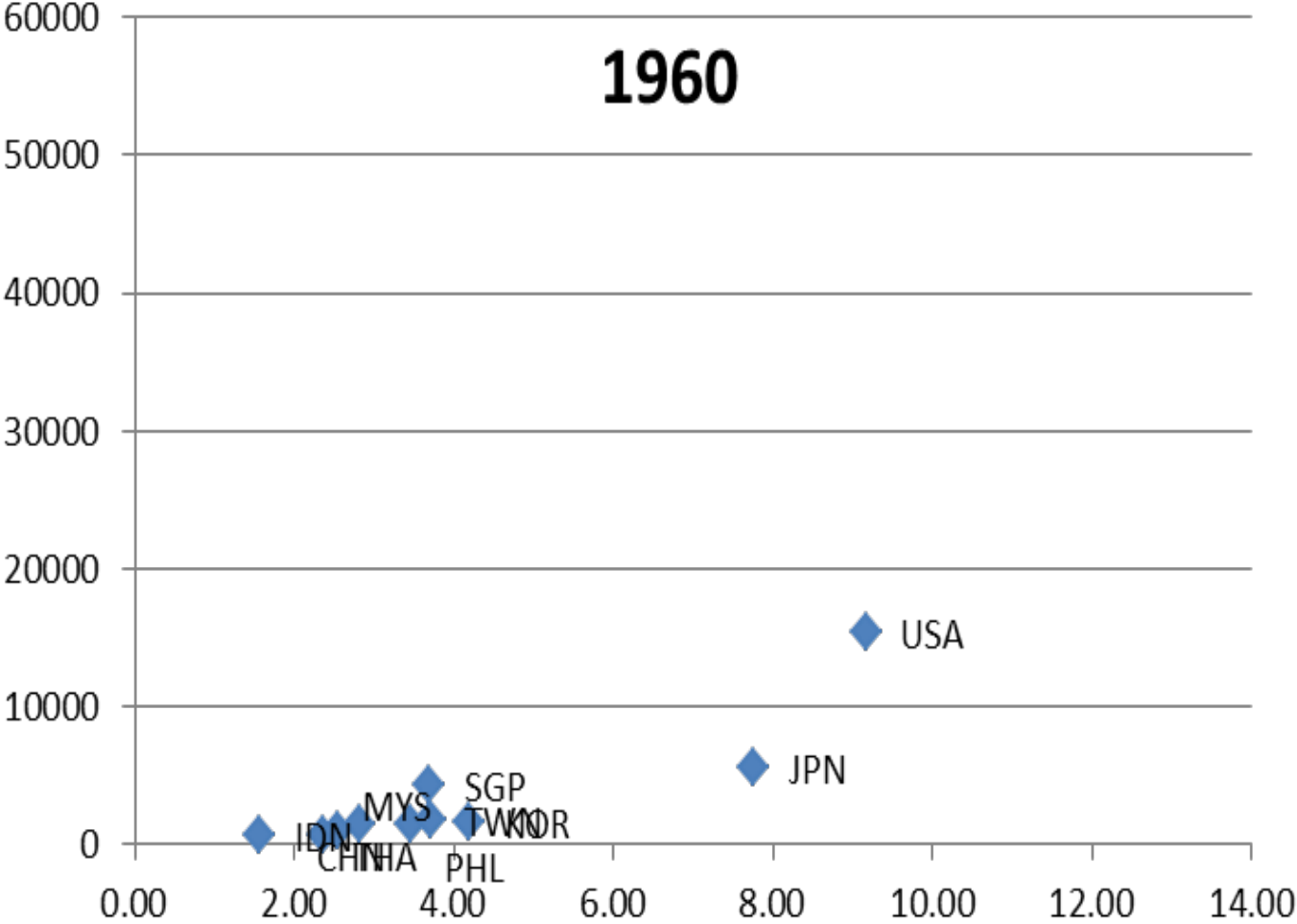
- Koizumi Reform without allowing any sanctuary: Further deregulations and privatization
- Strengthening of the Prime Minister's Office over ministries and legislators
- Reforms by the subsequent administrations including DPJ's.
- Today's "Growth Strategy" emphasizing innovation.

The question arises as to why economic growth remain sluggish despite these serious reforms?

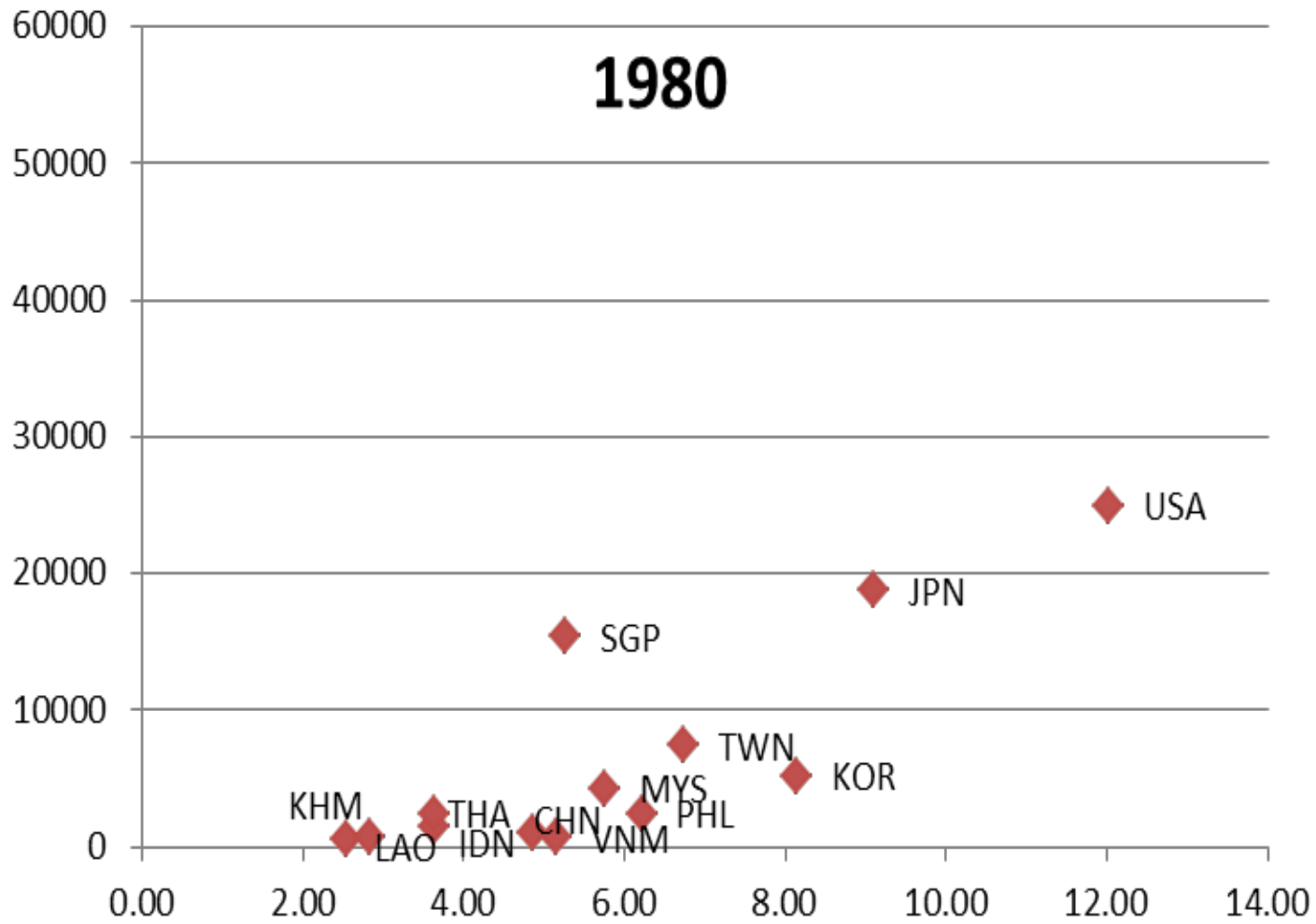
Hypothesis

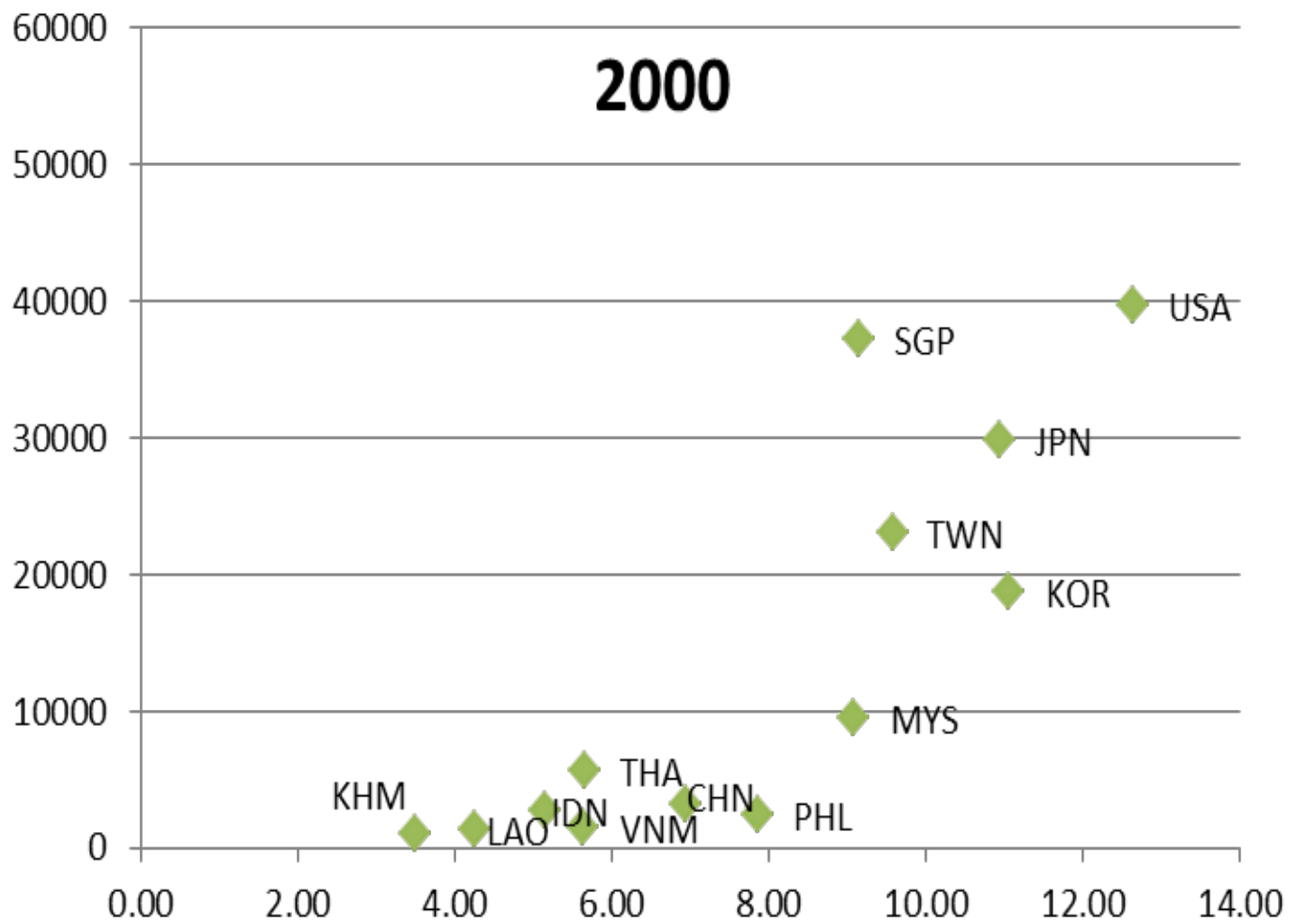
- Although “Growth Strategy” emphasizes innovation, it lacks the reform of higher education.
- Hypothesis: The reform of higher education will boost innovation.
- It is not just a problem of individual students but a problem of the system consisting firms, universities, the government, and students.

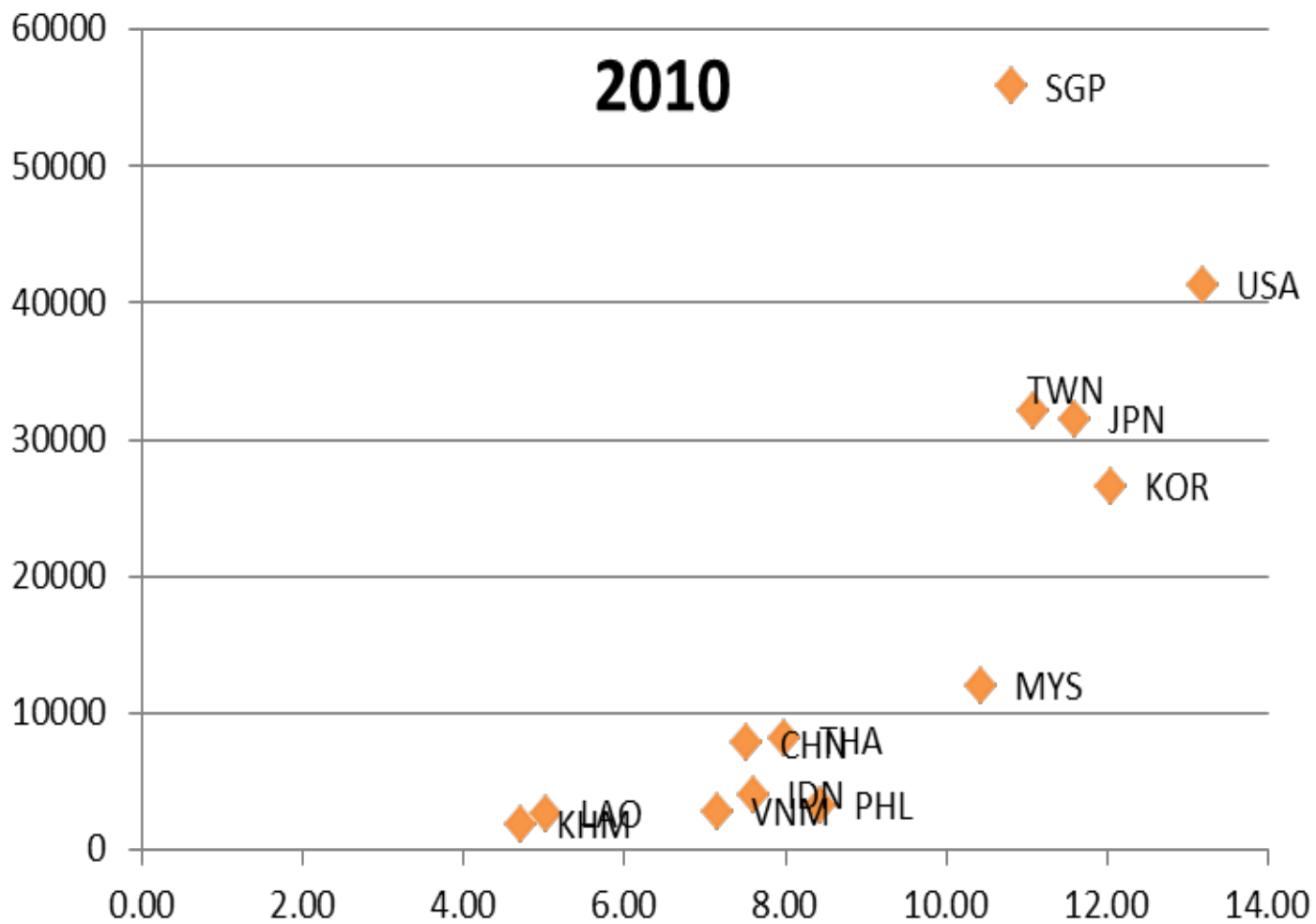
GDP per capita and Average Years of Schooling in Adult Population



1980







Thank you for your attention

Comments and suggestions are welcome