Aging and Economi c Growth

~Seeking the Frontier in Ja pan-Korea Cooperation

> Yukiko Fukagawa Waseda University

Outline

- Aging and economic growth: What matters?
- Japan's experience
- Korea's prospects
- Japan's growth strategies and the implications for Korea
- The frontier for industrial cooperation
- Totally new framework

Aging and Economic Growth

• Mature Economies: "Secular stagnation" argument by L.Summers:

Declination of potential growth rate (U.S.)

Real demand slump, Natural interest decline, asset bubbles....

• Emerging Economies:

"Middle income trap" argument: No endogenous resource but dependent on FDI (ex. Thailand)

"Aging constraints": End of input based growth,
Expanding inequalities, Asset bubble collapse
(ex. China, Korea??)

Aging and growth: theory

- Slower population growth Labor supply constraint
- Capital / Effective labor unit gains (Negative capital dilution effect)
- Technology progress (exogenous)
- Natural interest rate falls / Real wage hikes
- Per capita income gains

Aging and growth: Topics

- Aging and BoP: Capital outflows mitigat e falls in natural interest rate
- Aging and human capital investment: May work in long term with positive externalities
- Aging and pension reform: Impacts on household saving and labor supply
- Aging and asset price: Relations with wo rking age population, potentials for bubbl e?

Japan's Experience

- (1) Price
- Lowered expectation for growth (firms, ho usehold)
- Demand change but slower adjustment
- (2) Finance
- Fall in housing investment
- Preference for reserves and risk assets, De clining insurance
- Pressures for public finance through social security spending

Japan's Experience (2)

- (3) Local economies
- Widening regional income gaps
- Speed for changing industrial structure under labor supply constraints (ex. Construction, Agriculture....)
- (4) Balance of Payment
- Declining investment profits at home, Capital outflows and Hollonization?
- From trade balance to income balance and current account?

Japan's experience (3)

- (5) Labor supply slows down (1996 ~ Working population, 2009 ~ Total population)
- Pressures for labor mobility, Political labor p rotection potentials
- Labor participation by women and seniors
- (6) Labor productivity and industrial structure
- Slower globalization (SMEs and services)
- Underperforming service sectors in pushing up productivities

Japan's experience and the Implications for Korea

- The biggest constraint: Fall in labor input a s well as the real demand
- After the property market bubbles, real de mand may stagnate
- Regional gap widens
- Outbound FDI by MNEs
- Diversified labor/ working environment
- Significance of deregulations, promotion of services, productivities, Location advantage

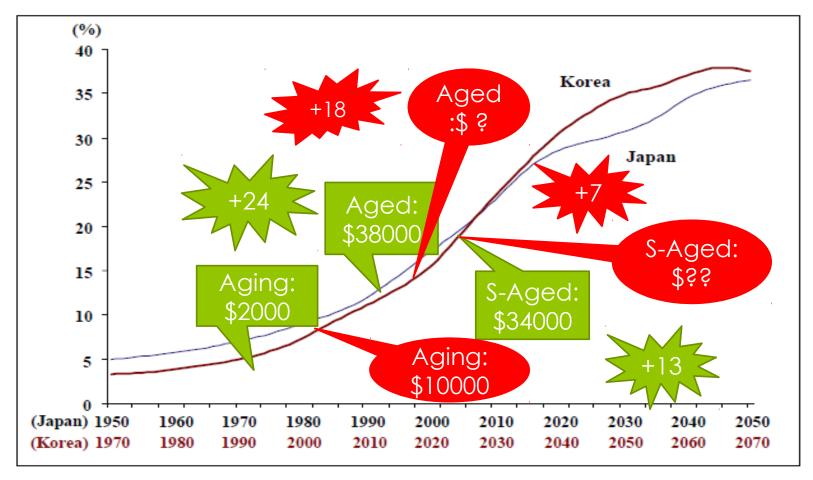
Korea's prospects

- (1) Aging speed is too fast
- Premature social securities (Pension, Medical supports, Public assistance)
- → Low productivity labor by the aged
- → Medicare expenditure/ Household spending soars, Nursing service options?

Korea's prospects (2)

- Risks in property market landing
 - → Financial crisis from household debts
 - → Negative asset performance for the wealthier
- Vicious cycles with low birthrate
 - → Early retirement and policy myopia
 - → Education investment returns and low birth rate

Fastest Aging by Korea (LGRI)

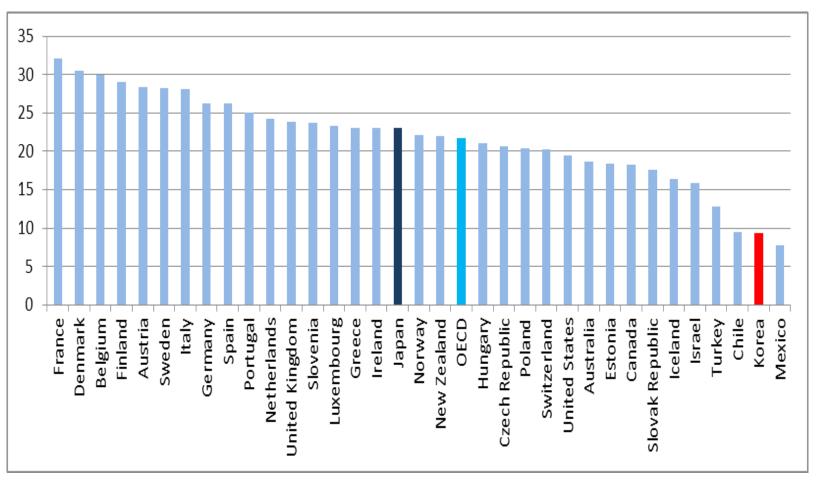


Note: Aging rate is defined as the proportion of elderly population over 65 out of the total population.

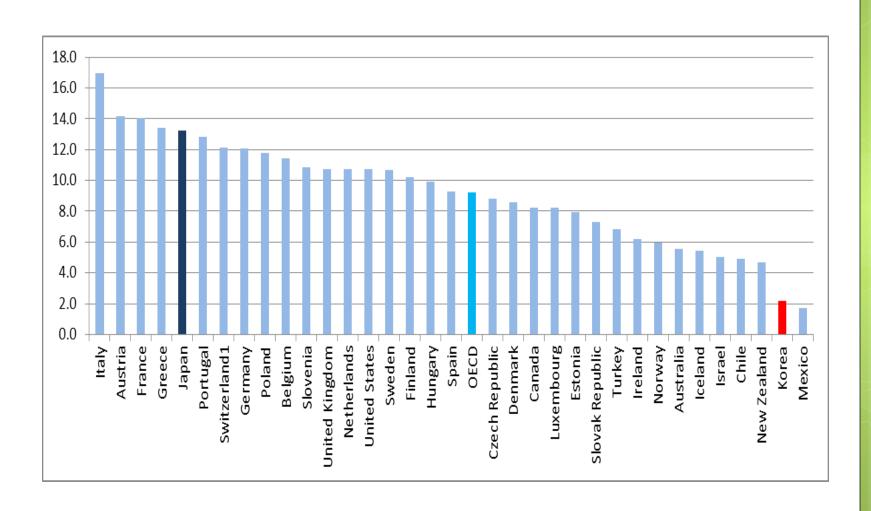
Source: UN Population Division of the Department of Economic and Social Affairs of the United

Nations Secretariat, World Population Prospects: The 2012 Revision

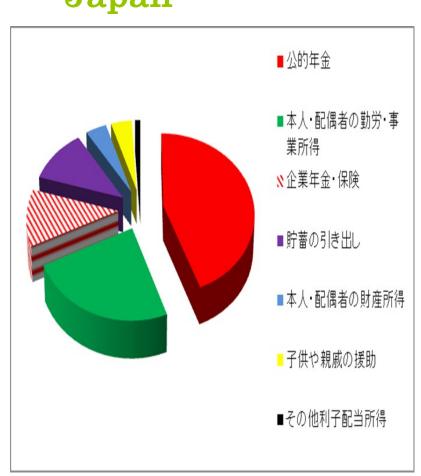
Social spending / GDP(%)

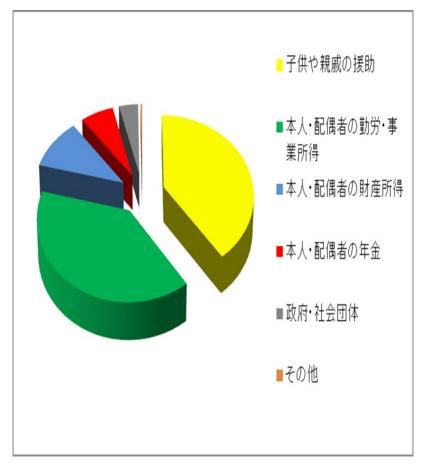


Pension spending / GDP(%)



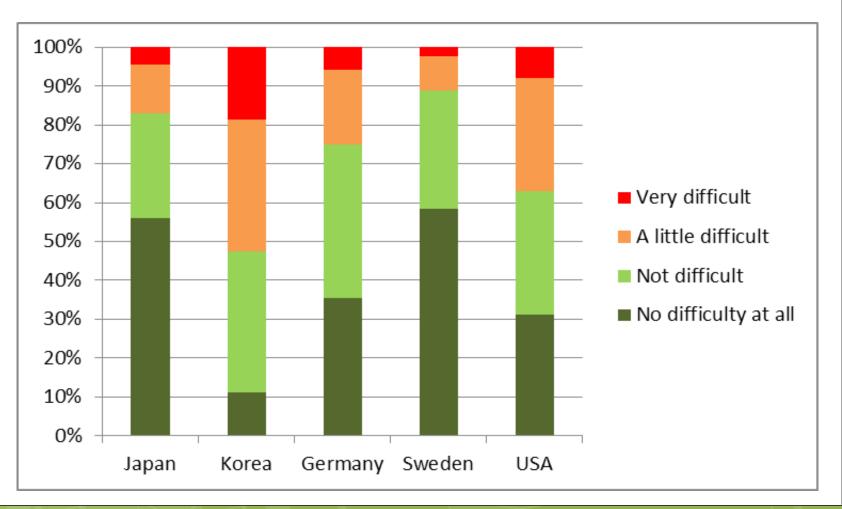
Household income structure etirement Japan Korea





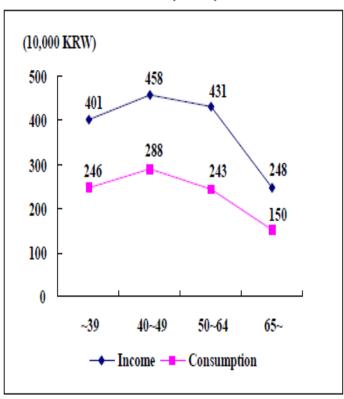
Economic difficulties in retired lif

e ? (Ministry of Cabinet Office 2010)



Rapid fall in household spending by the retired

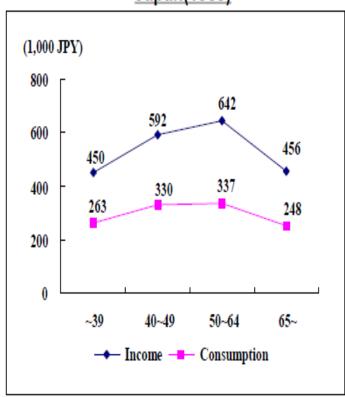
Korea(2012)



Note: Data are for all HHs of two or more members throughout the country excluding agricultural, forestry, and fishery HHs. Income includes both ordinary and non-ordinary income.

Source: HIES

Japan(1989)



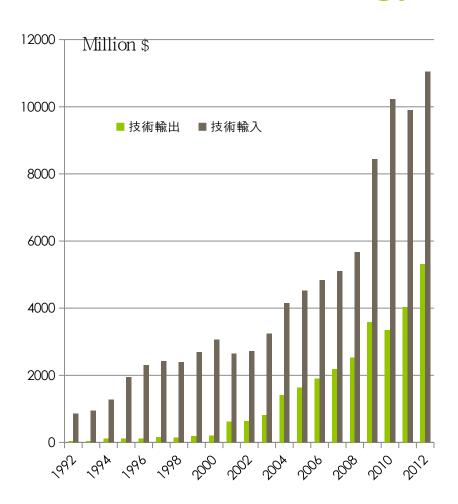
Note: Data are for all HHs of two or more members throughout the country. Annual incomes are divided by 12 months to determine monthly average incomes in the case of Japan.

Source: National Survey of Family Income and Expenditure(NSFIE)

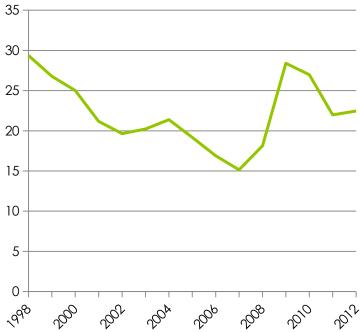
Korea's Prospects (2)

- (2) Aging timing is bad?
- Aging > Innovation-led growth pattern
- → Declining human capital in science
- → Fragile risk-money supply
- Aging > Modularization
- → Global competition (vs. China)
- → Poorer tacit knowledge accumulation
- Aging > Unification
- → Social security constraints

Korea's Technology trade and R&D



技術導入/研究開発支出(%)



Korea's Prospects (3)

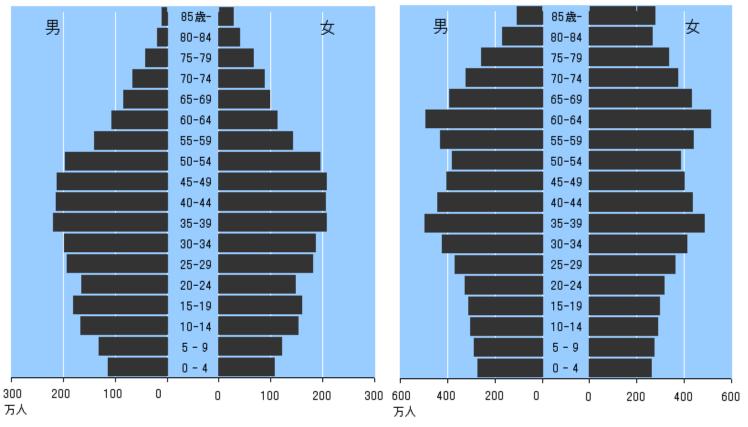
- (3) But still hope remains?
- Remaining chances for higher birth rate
- High urbanization rate, IT society
- → Smaller administration cost
- Starting from Small pay, Small benefit
- → Smaller political cost for re-designing the social security system

Korea's Prospects (3)

- Chances for cutting medical spending
- Lower resistance for immigration
- Better educated seniors
- Final chance of unification

Demographic structure, Korea versus Japan (総務省統計局「世界の統計 2012)

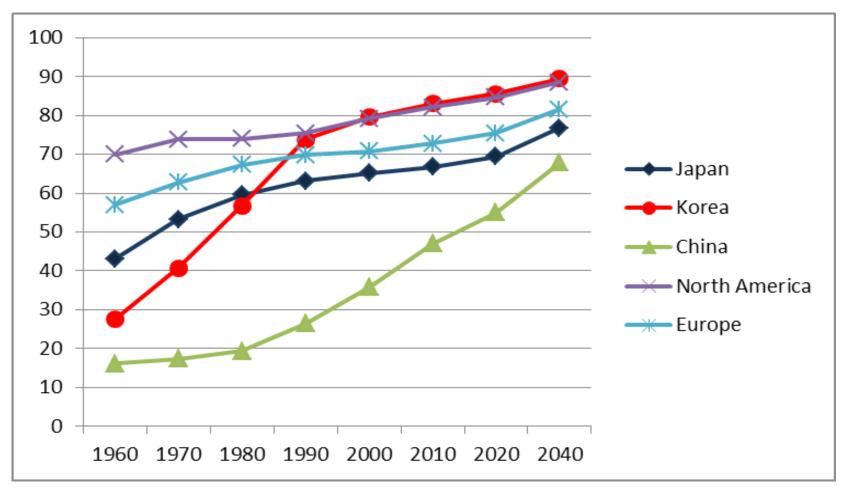
韓国の人口ピラミッド(2010年推計) 総人口:4,887万人 65歳以上人口比率:11.0% (参考)日本(2010年国勢調査) 総人口:12,806万人 65歳以上人口比率:23.0%



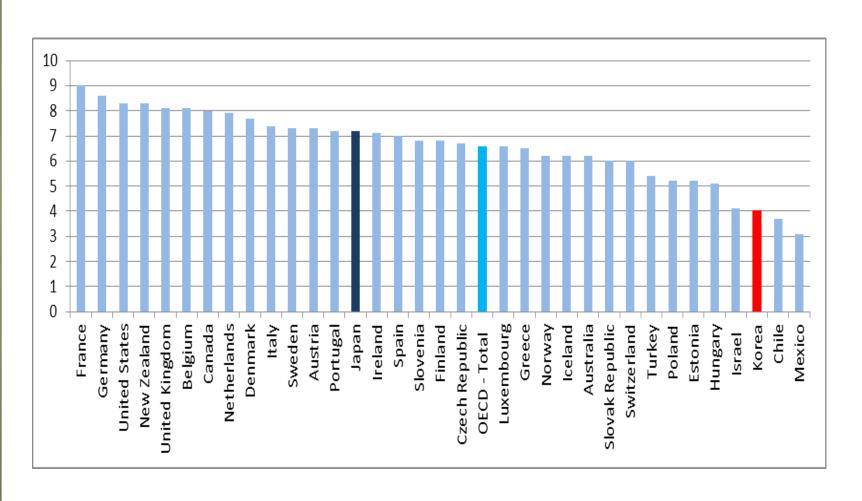
(資料)総務省統計局「世界の統計2012」(韓国原資料は国連人口統計年鑑)

Urbanization: Trend and Prospects

(UN, World Population Prospects(2010))



Medical spending/GDP It (%)



Growth strategies of the Super-Age d country: Japan



Japan's growth strategy vs. Korea

- Similar directions : Reinforcing industrial base, Globalization Real demand
- Different progress : Industrial restructur ing, Location advantages (K > J), SME sto ck, External assets (J > K)
- Diverging approach: Domestic market for innovation opportunities (Medical and Healthcare service, New energies, Next generation infrastructure....)
 - Increasing labor input by women, the aged, foreigners raising productivity

Industrial revitalization Plan

①緊急構造改革 プログラム

(産業の新陳代謝の促進)

②雇用制度改革・ 人材力の強化 ⑥中小企業・小規模事業者の革新

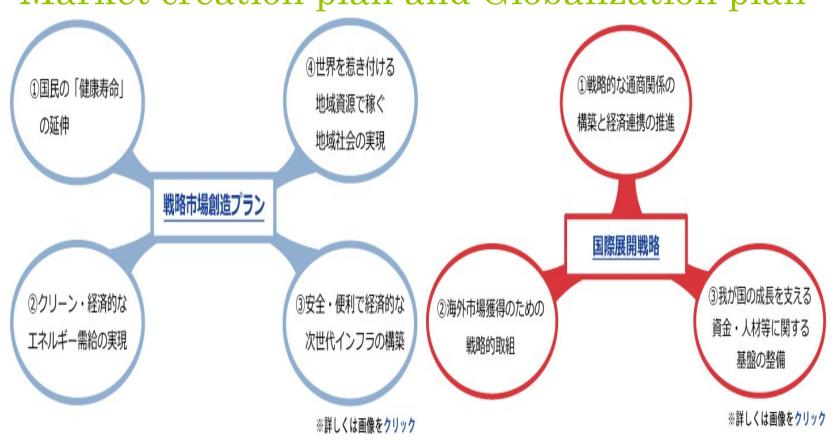
日本産業再興プラン

③科学技術 イノベーションの推進 ⑤立地競争力の 更なる強化

④世界最高水準の IT社会の実現

※詳しくは画像をクリック

Market creation plan and Globalization plan



10 Priorities

1. 日本の「稼ぐ力」を取り戻す

改革に向けての10の挑戦

「企業が変わる」~「稼ぐ力」の強化

- (1)《コーポレートガバナンスの強化》
 - コーポレートガバナンス・コードの策定
- ②《公的・準公的資金の運用の在り方の見直し》
 - GPIFの基本ポートフォリオ、ガバナンス体制の見直し
- ③《産業の新陳代謝とベンチャーの加速、成長資金の供給促進》
 - 大企業を巻き込んだ支援、政府調達への参入促進、エクイティ等の供給。

「国を変える」

- 《成長志向型の法人税改革》
 - 数年で法人実効税率を20%台まで引き下げることを目指す
- ⑥《イノベーションの推進とロボット革命》
- 革新的な技術からビジネスを生み出すナショナルシステム
- ロボットによる社会的課題の解決と新たな産業革命

2. 担い手を生み出す~女性の活躍促進と働き方改革

⑥女性の更なる活躍促進

- 学童保育の拡充
- 女性就労に中立的な税・社会保障制度等の実現

⑦働き方の改革

- 働き過ぎ防止のための取組強化
- 時間ではなく成果で評価される制度への改革
- 多様な正社員の普及・拡大
- 予見可能性の高い紛争解決システムの構築

- 外国人技能実習制度の見直し
- 製造業における海外子会社従業員の受入れ
- 特区における家事支援人材の受入れ
- 介護分野における外国人留学生の活躍

3. 新たな成長エンジンと地域の支え手となる産業の育成

② 攻めの農林水産業の展開

- 農業委員会・農業生産法人・農業協同組合の一体的改革
- 酪農の流通チャネル多様化
- 国内外とのバリューチェーンの連結(6次産業化、輸出の促進)

🖤 健康産業の活性化と質の高いヘルスケアサービスの提供

- 非営利ホールディングカンパニー型法人制度(仮)の創設
- 個人への健康・予防インセンティブの付与
- 保険外併用療養費制度の大幅拡大

10 Priorities for growth

- \circ If Y=A F(K,L)
- •Increase K, or returns of K:
 Corporate governance, Public funds
 reforms, Encouraging entrepreneurship,
 Corporate tax
- •Increase A: Innovation through science and te chnology, Agricultural reform, Healthcare and medical service innovation.....
- •Increasing L: Women, senior, and foreign labor participation, flexible working environment

Reinforcing workforce

- Women: Tax and social security syste m reform, Information opening of diversi ty management, nursery support..
- Diverse working: Flex/ Free working system, Performance based labor time control, Diverse regular workers, Monetary relief for labor disputes
- Foreigners: Skill training system reform, Employment reform (Manufacturing, Nursing, Housekeeping....)

Strategic Health, Healthcare servic e

- Promoting better management of medical se rvices: Non-profit holding companies for tot al medical care and nursery service
- Promoting health incentives: Healthcare point and point based insurance, Big data analy sis
- Promoting medical service uncovered by ins urance: Tissue engineering, Medical equipme nt development
- ICT innovation

New industrial cooperation by age d societies

- Traditional industries: Comparative location advantage for cross-border b usiness accumulation, and risk-avers e SCM
- Basic science for solution: Medical se rvice system, Robot, New generation transportation....)
- Big data analysis for aged spending, medical care, food....

New industrial cooperation by aged societies (2)

- ← Economic Partnership Agreement (EPA)
- ← IPR protection/ dispute solution system
- ← Coordination of competition policies
- ← Movement of persons: Common qualification standards for professionals,
 Preventing social security free ride,
 Criminal investigation cooperation....

Conclusion

- Aged JK relations: End of manufacturing based competition
- Strategic values of geography and human capital
- Where to complement: K needs innovation market, J needs innovation human capital
- Common goal: Providing public goods with the rest of aging Asia (ex. Efficient medical services, Good health)