

Human Capital and Economic Growth of Taiwan

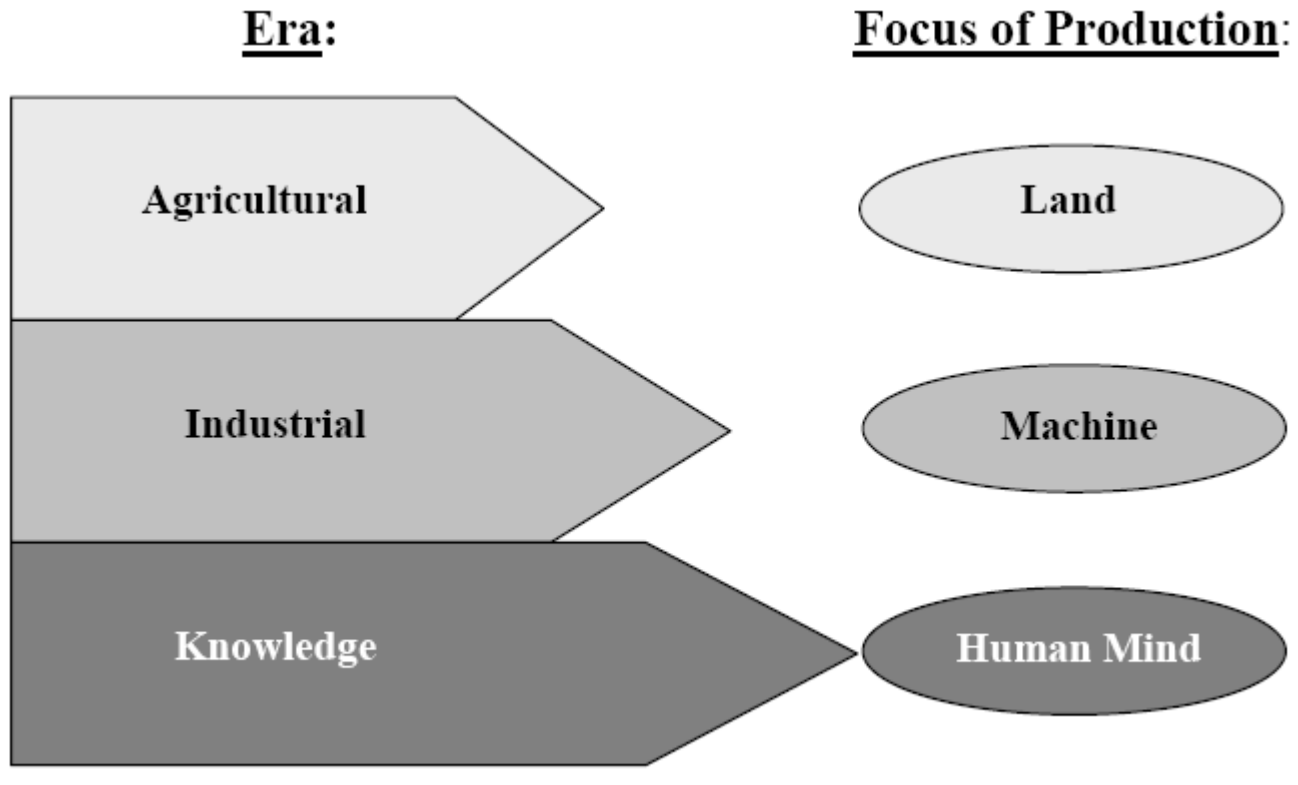
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Outline

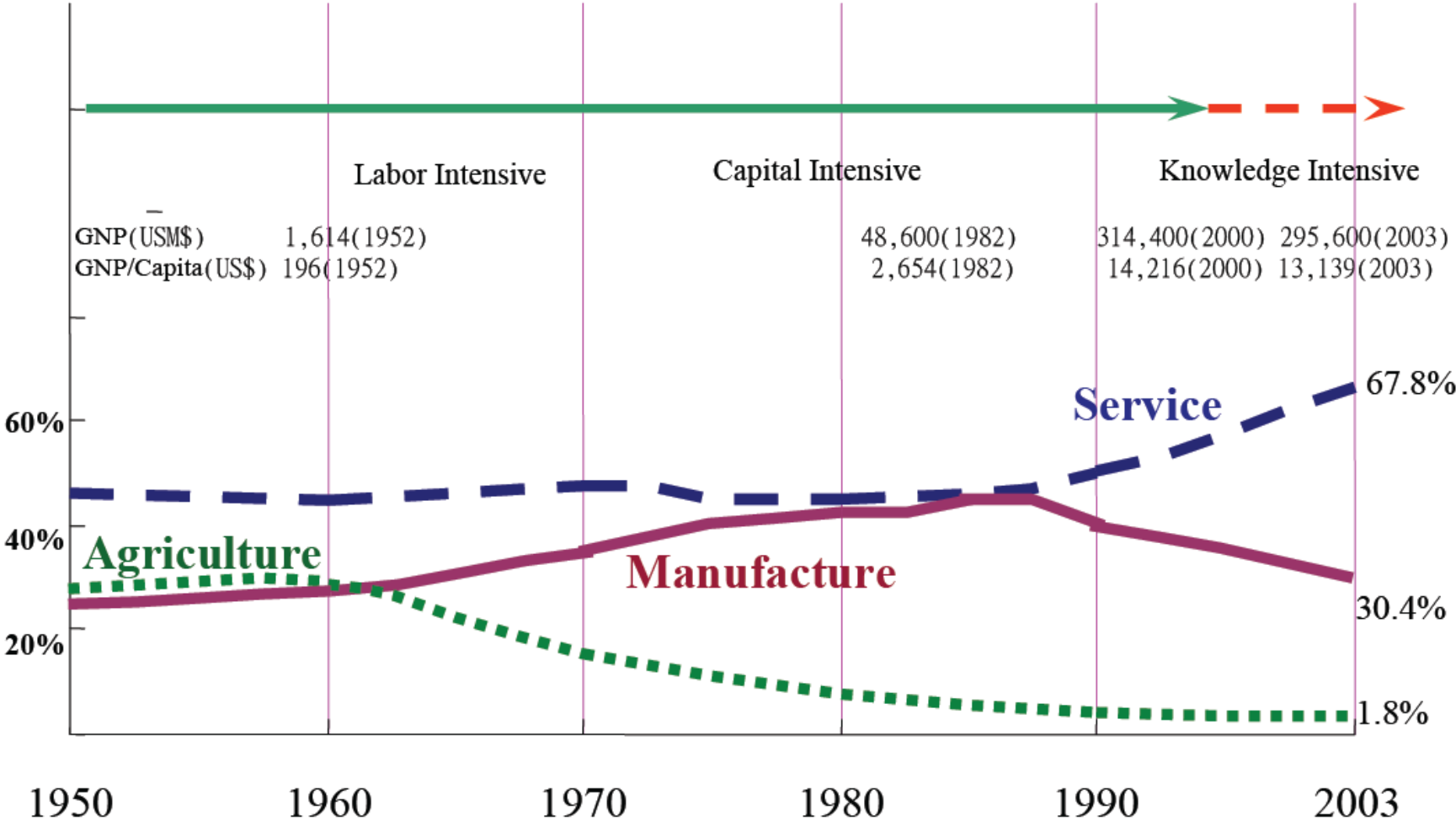
1. Introduction
2. Human Capital in Taiwan
3. Some facts about Economic Development of Taiwan
4. A Global view
5. Perspectives after Global Financial Tsunami
6. Conclusion

I. INTRODUCTION

What is really matter?



The Shifting of Industrial Structure In Taiwan



Source : Statistics Dep. Of MOEA

Human capital and its role

- Human Capital

- Education

- Human Network

- Structural Capital

- Intellectual Property

- Infrastructure(IT)

- City Infrastructure

- Institutions

- Social Capital

- Venture Capital

- Industrial Network

- International links:

- Brands,

- MNC's R&D Centers
/IPO

- Trade Shows

Changes in the Nature of Work

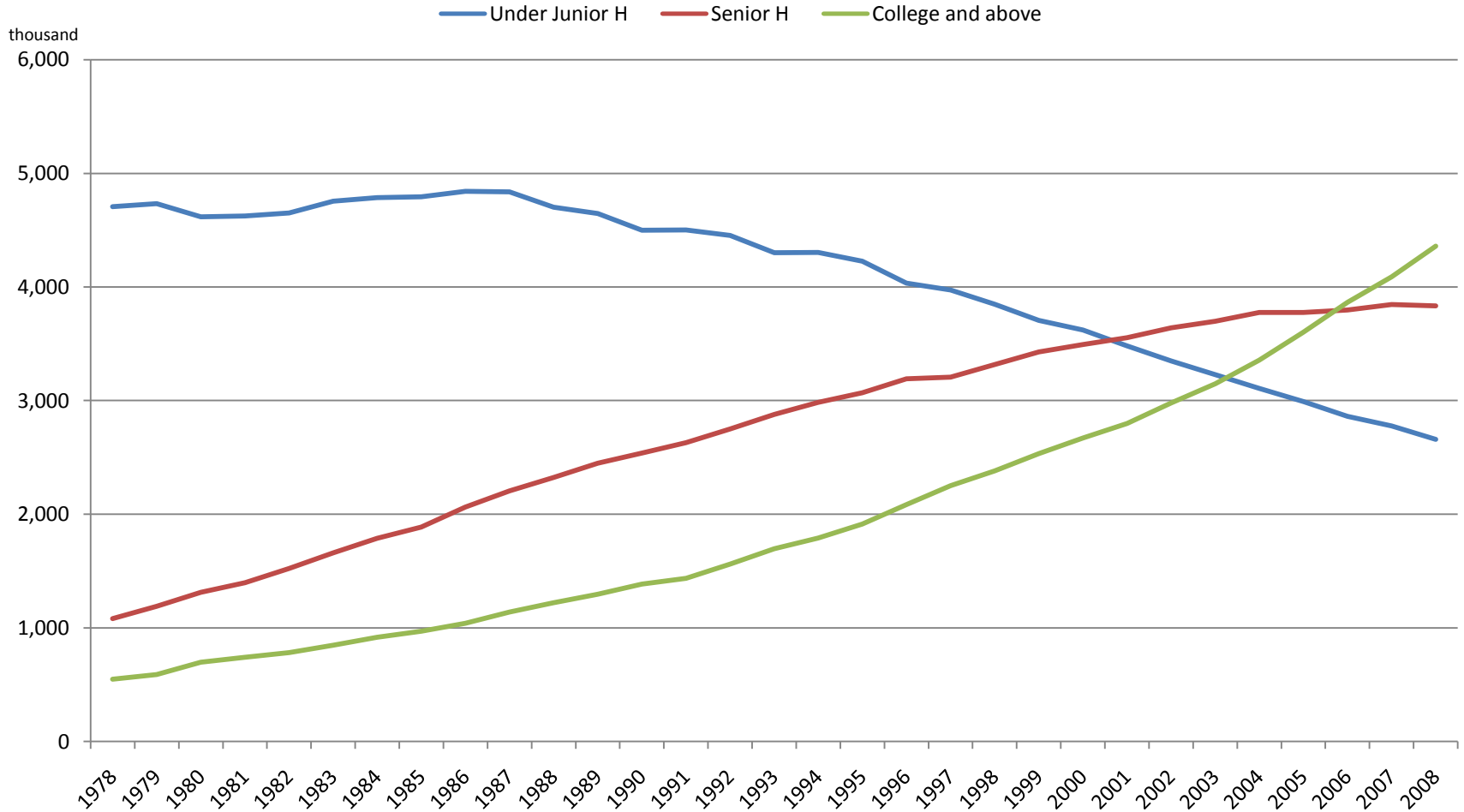
1. The Interweaving of Technology and Jobs
2. Changes in the Design of Jobs (there will be no stable jobs in the future)
3. Integration of Contingent Workers into the Workforce
4. Increased Emphasis on Continuous Learning
5. External Control of Performance Standards by Customers (Boom of services industry)
6. Limitations on Leadership and Supervision
7. Changes in the Structure of Work From Individuals to Teams

II. HUMAN CAPITAL IN TAIWAN

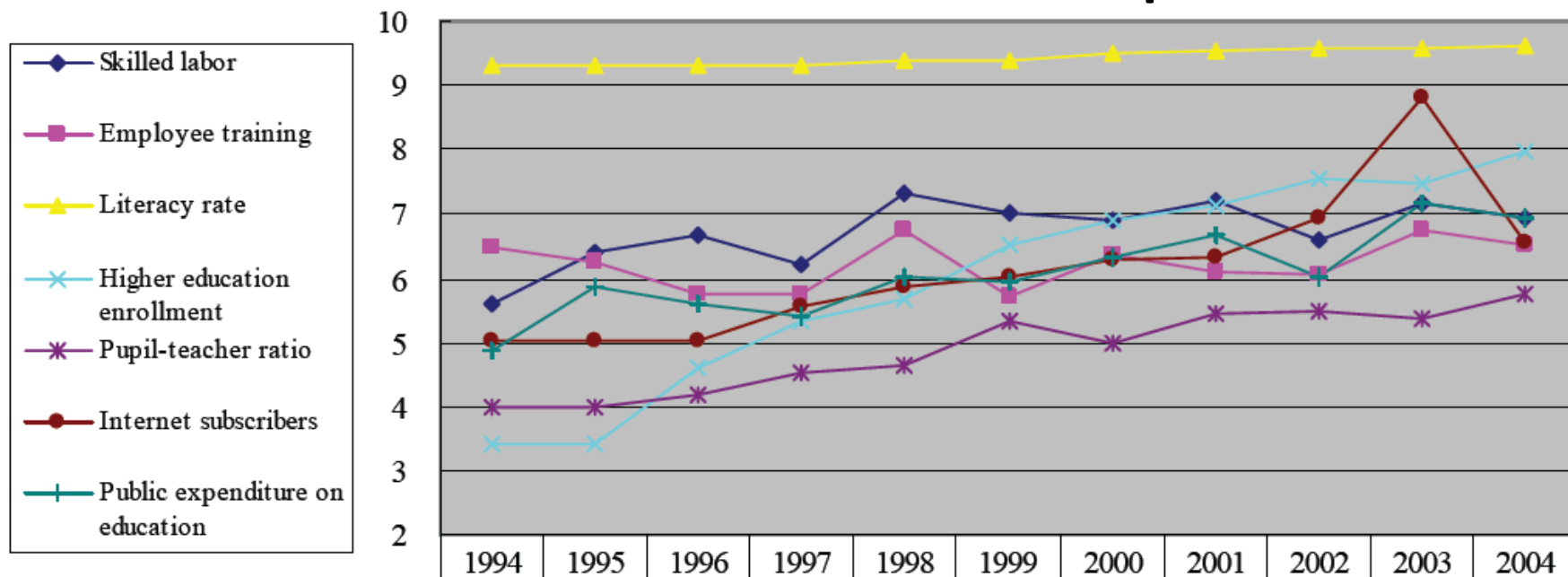
Frame work of Human Capital in Taiwan

- Higher educations continue to grow
- High Quality Human Capital focus on Science and Technology
- Chinese culture of industriousness:
 - Working hour=2280hours/year
 - 24-hour working factory
 - 24-hour convenient store

Structure of Educated Populations

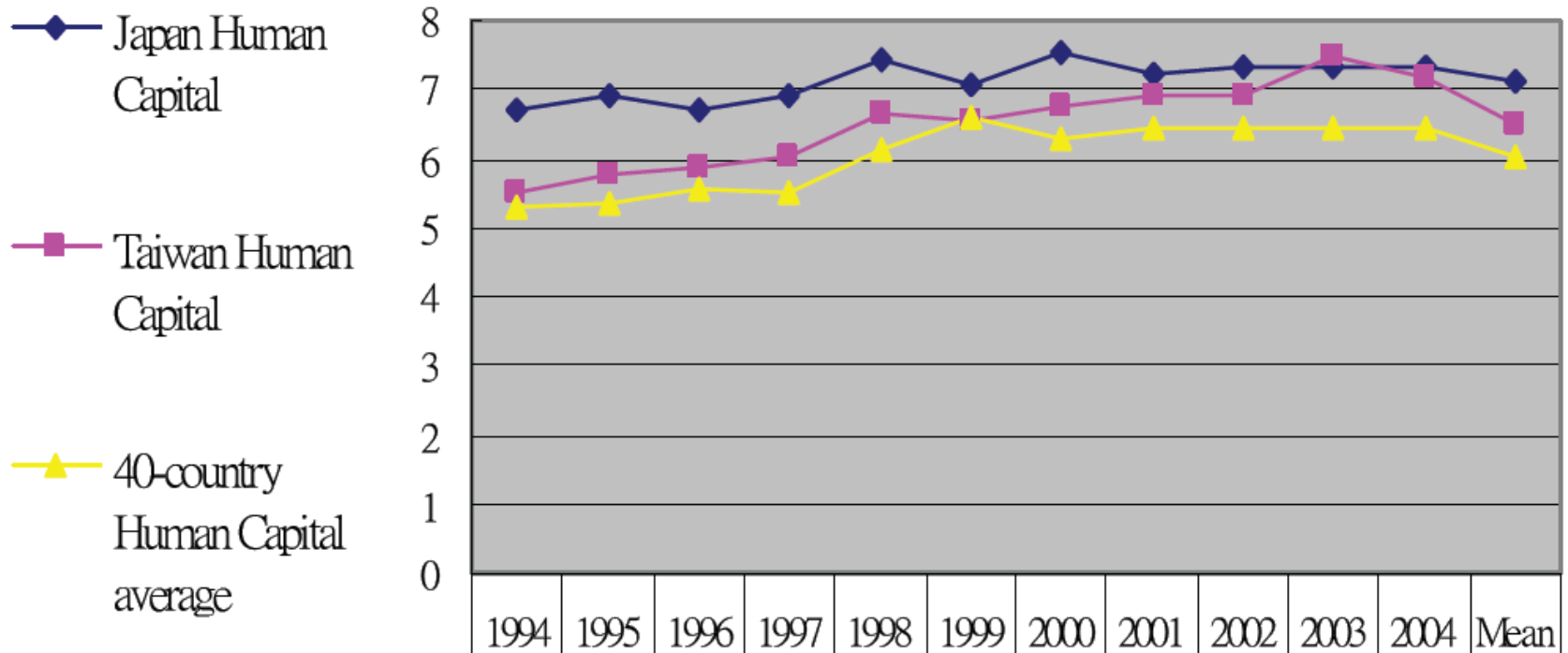


Numbers and Trend of Taiwan's Human Capital



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Skilled labor	5.590	6.410	6.670	6.210	7.333	7.000	6.883	7.210	6.580	7.170	6.950
Employee training	6.470	6.250	5.750	5.741	6.760	5.729	6.350	6.110	6.056	6.740	6.510
Literacy rate	9.310	9.320	9.320	9.320	9.400	9.400	9.490	9.530	9.560	9.580	9.600
Higher education enrollment	3.434	3.434	4.587	5.329	5.689	6.532	6.914	7.128	7.560	7.479	7.961
Pupil-teacher ratio	4.000	4.000	4.167	4.545	4.651	5.314	4.975	5.436	5.474	5.376	5.761
Internet subscribers	5.011	5.021	5.021	5.565	5.865	6.023	6.271	6.343	6.939	8.812	6.552
Public expenditure on education	4.874	5.883	5.598	5.423	6.012	5.957	6.324	6.688	6.024	7.180	6.937

International Comparison



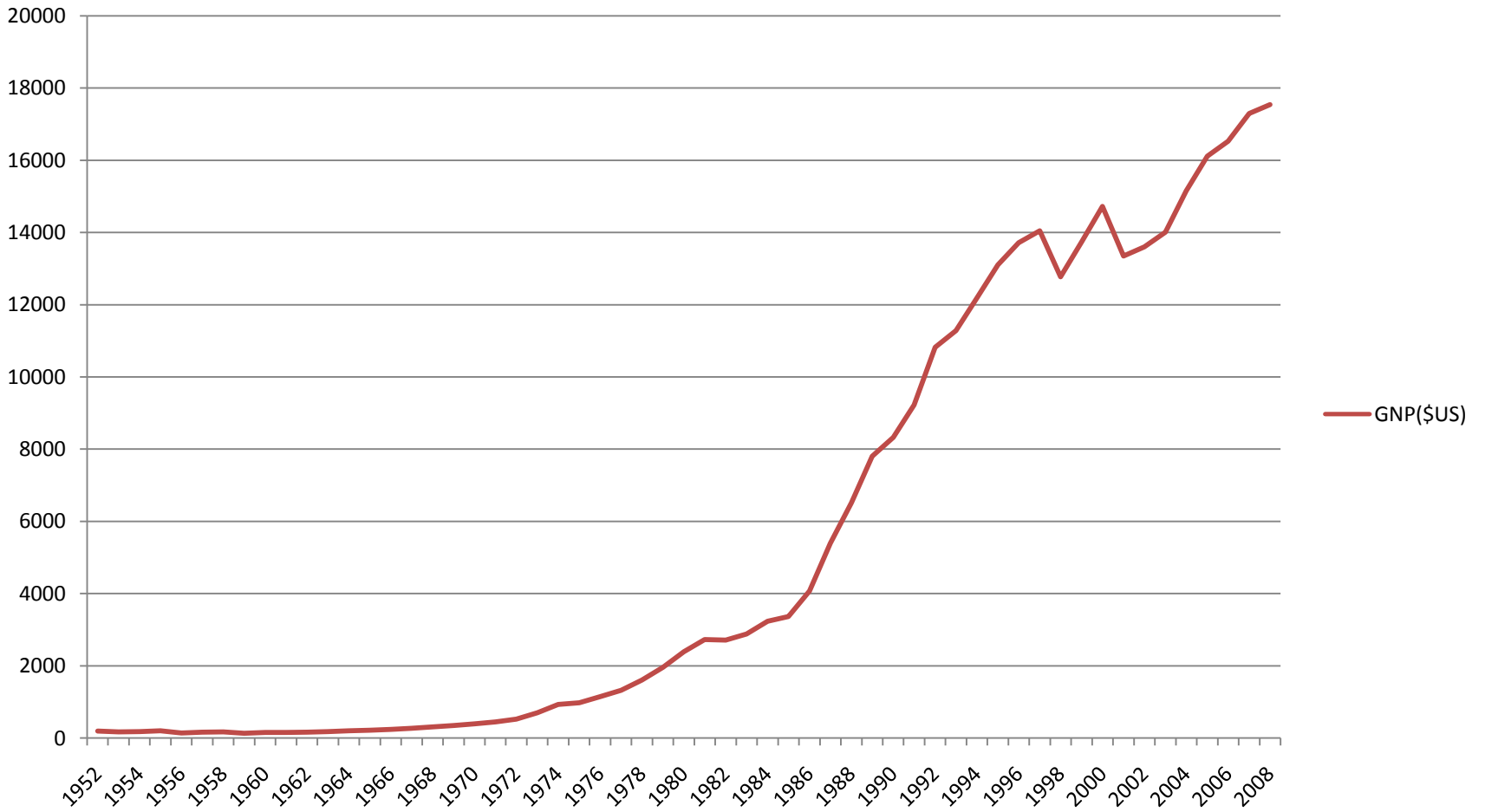
Japan Human Capital	6.693	6.888	6.722	6.894	7.441	7.053	7.540	7.243	7.319	7.312	7.316	7.129
Taiwan Human Capital	5.528	5.760	5.873	6.019	6.641	6.565	6.744	6.921	6.885	7.477	7.182	6.509
40-country Human Capital average	5.320	5.373	5.542	5.522	6.138	6.592	6.262	6.425	6.434	6.460	6.460	6.048

III. SOME FACTS ABOUT ECONOMIC DEVELOPMENT OF TAIWAN

Taiwan Economy

- Population=22,715,030
- GDP >200 billion Dollars (after 1990)
- Growth rate= 3.63%
- Unemployed rate= 6.13%(2009)
- After 1960, Manufacturing sector leads the growth.
- After 1990, Service sector (with knowledge intensive industries) dominates the economy.

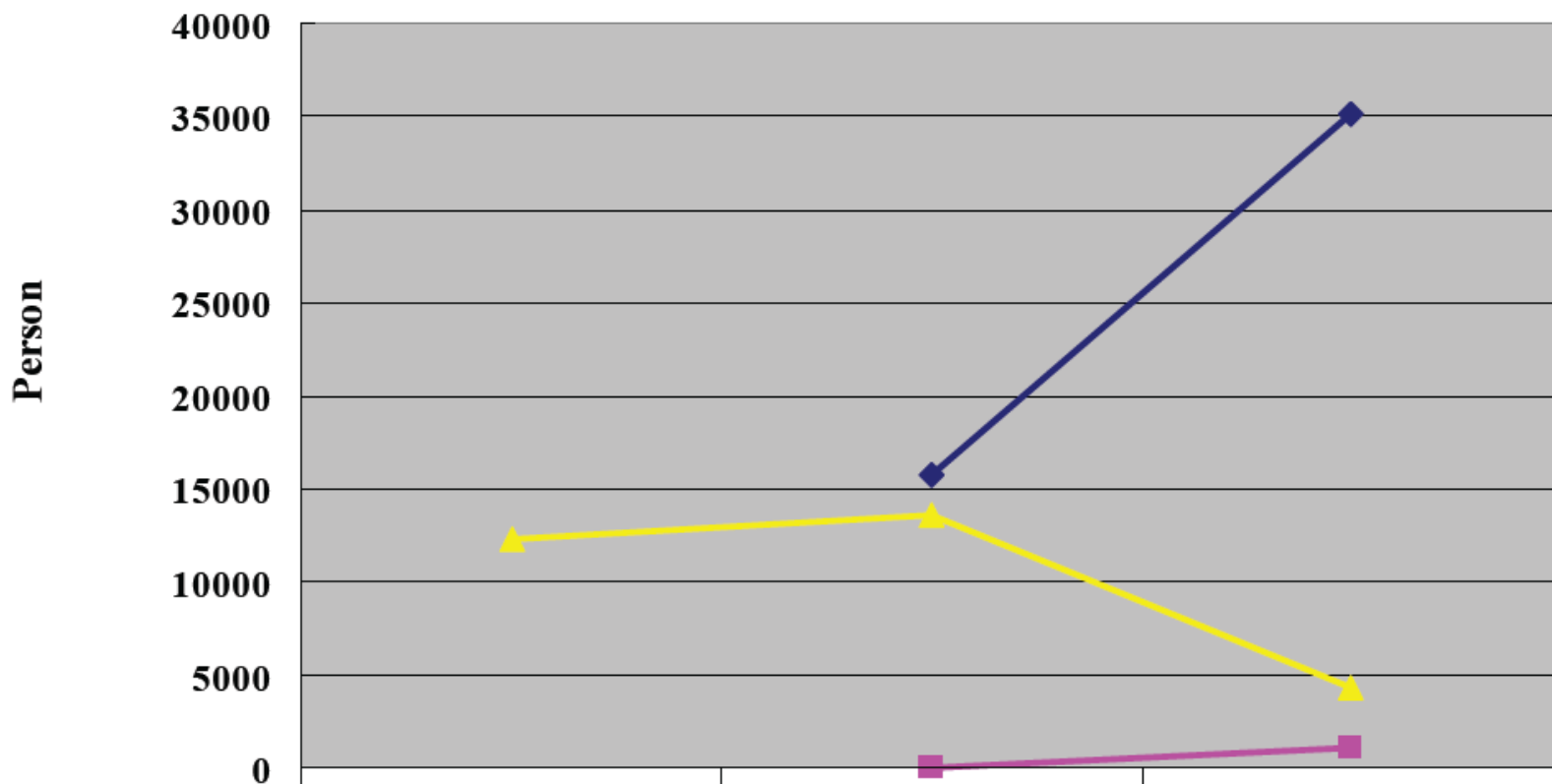
Average GNP(\$US)



Economic growth rate (real)(%)

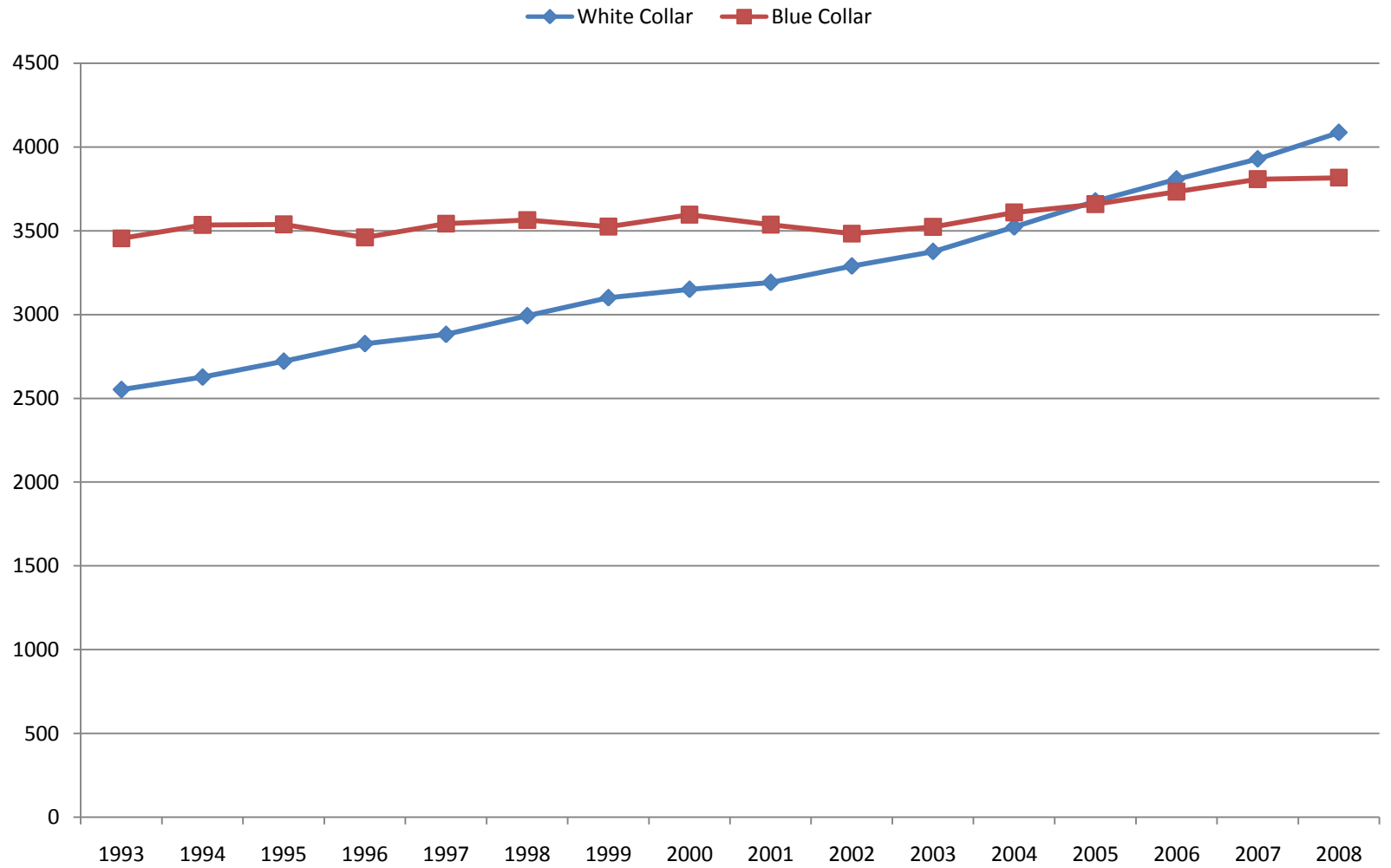


Number of Trainees Supported by Bureau of Employment & Vocational

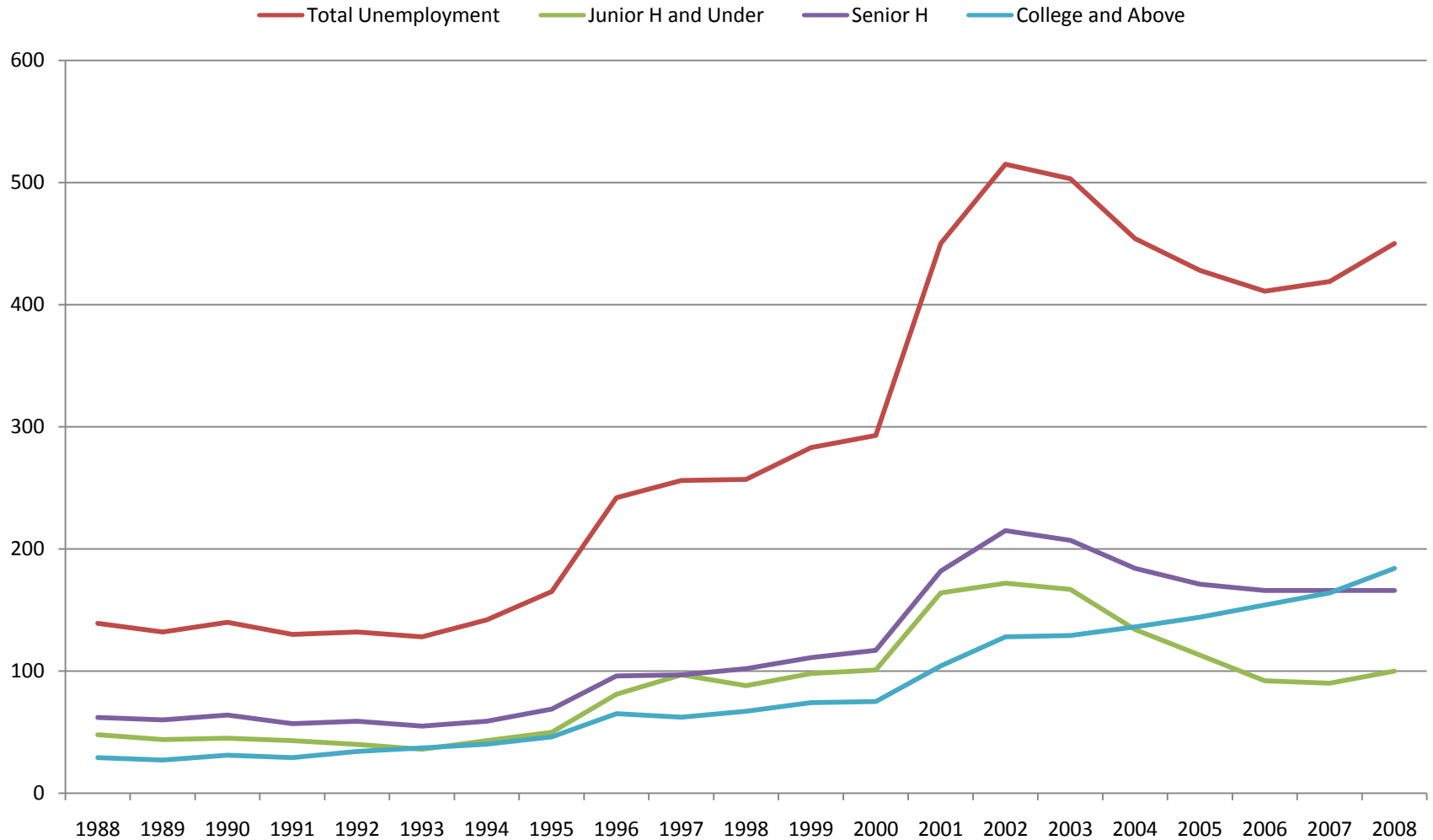


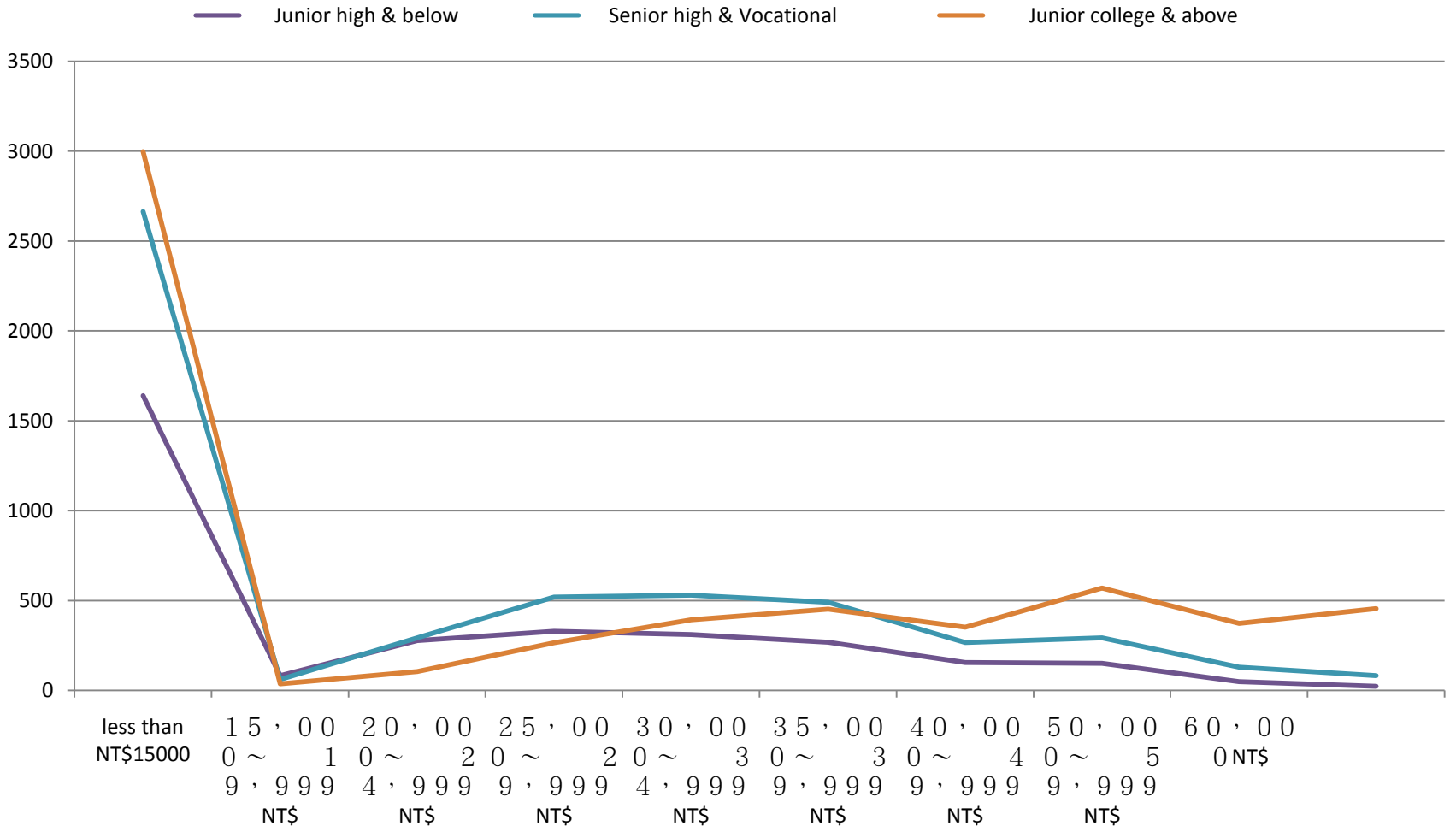
◆ Training for college students	NA	15792	35107
■ Training for International collaboration	NA	0	1065
▲ Training for target industry	12325	13591	4266

Dual Economy



Dual Economy(cont.)





Supply Chain and Human Capital



IV. A GLOBAL VIEW

The Global Financial Crisis: A horror story about to end?

- 2007, 2008 – anni horribilis
- US housing crisis became Wall Street crisis & later Main Street crisis (from Bear Stearns to GMotors)
- US crisis also quickly became a global financial crisis precipitating a recession in US, UK, Europe, BRIC, Japan, SKorea, Singapore
-
- China's displaced in 2008 reached 20 M, prompting ILO to revise global job loss estimate to 50 M + by 2009
-
- Also, financial crisis aggravated food crisis & fuel crisis (3Fs), especially in 3rd World
- But today, Obama & G20 proclaiming global recovery!

Is recovery on hand?

Is recovery sustainable?

- Yes, stock markets in US, UK & elsewhere are recovering &
- Big banks are once again giving fat bonuses to their CEOs
- Yet , REAL ECONOMY not recovering yet
- US unemployment rate continues to rise, now 9.8 per cent or twice the pre-crisis rate (from 7M + to 15M today)
 - ✓ Europe's unemployment rate at about 9 per cent
 - ✓ Japan's unemployment at post-WWII high
 - ✓ Taiwan's unemployment at historical high
 - ✓ Global job growth generally flat except for a few countries, including China
- Above all, no indications that growth will be broad and sustainable, with effects of Climate Change aggravating economic situation in many Asia-Pacific countries

Explanations for D' Crisis?

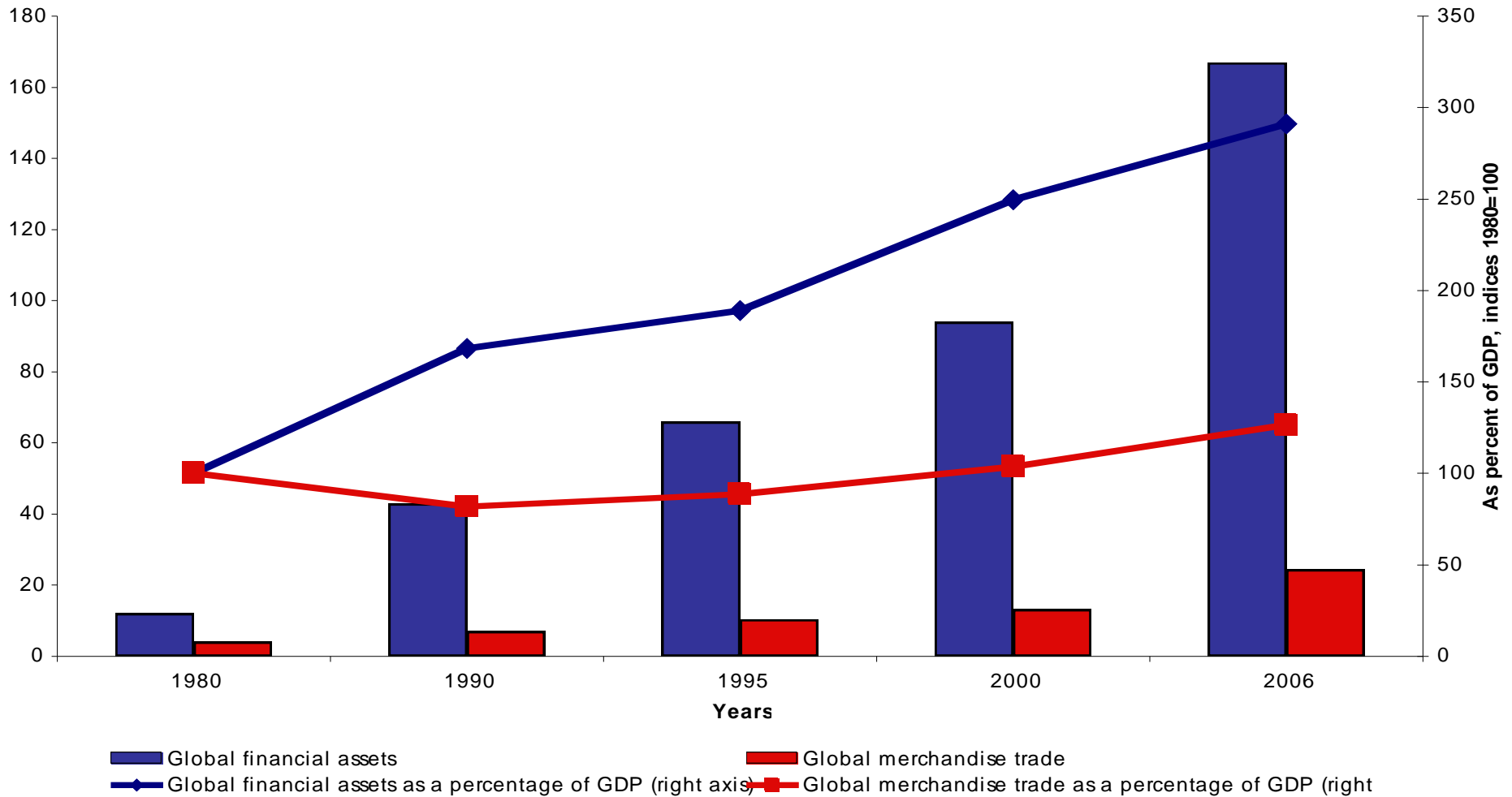
Bubbles bursting –

- US housing bubble, financial bubble
- EU financial bubbles
- Commodity bubbles
- + Financial scandals (BMadoff's \$50B+ scam)

'Financialization' -- speculative finance capital ruling over productive capital & dominating global economy, facilitated by policy of deregulation – leading to corporate/CEO GREED!

Globalization: finance dominating trade

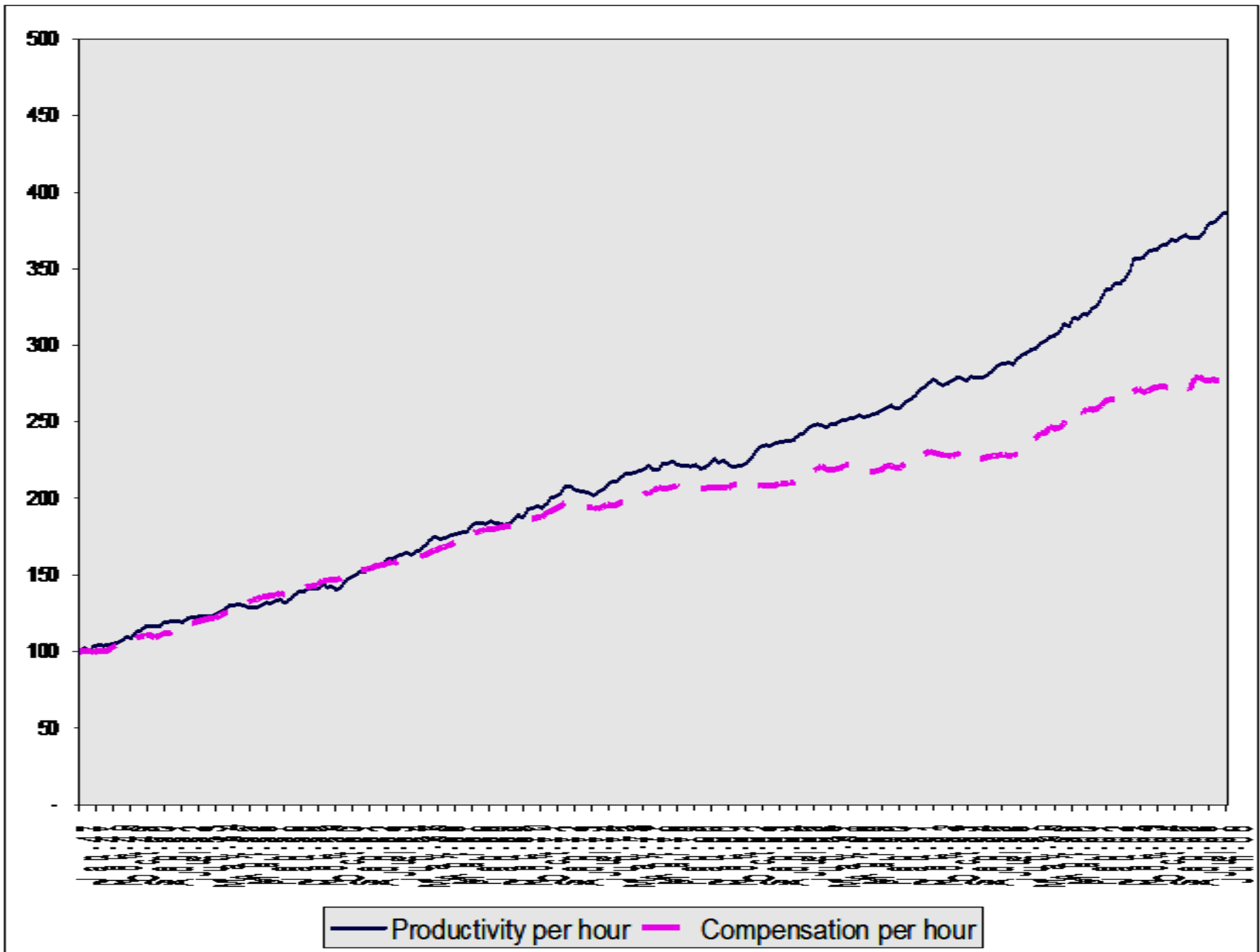
Figure 1
Finance driven globalization



Deeper explanations for the crisis: Unequal World, Missing Labor Share

Since the 1980s, predominance of Neo-liberal TNC-led globalization characterized by

- Global overproduction, due to global supply chains (esp. in China & Asia) & new technology (ICT, transport, etc.) facilitated by free trade policy (IFIs, WTO, etc.)
- Yet global under consumption, due to limited compensation to global mass producers (workers/farmers) – global RACE to the Bottom
- Global profits brought in US/UK & invested on speculation, e.g., GE, Ford, Toyota going financial; even China invested \$1trillion in US bonds & acquired Blackstone, a PE hedge company



US productivity/compensation gap – 1947-2008

V. PERSPECTIVES AFTER GLOBAL FINANCIAL TSUNAMI

ILO 2008-2009 Global Wage Report

1995-2007

global wages grew by 0.75 per cent annually

vs.

GDP per capita growth of one (1) per cent annually

Moreover,

- share of wages in GDP going down**
- share of profits in GDP going up**
- gap between top wages and bottom wages widening**
- wage gaps between genders remain high**
- collective bargaining coverage going down**

Neo-liberal thinking prevailed & became a global Washington Consensus starting w/

**privatization programs of Reagan & Thatcher
and**

WB's "structural adjustment programs" (SAP) for indebted countries (preaching privatization, economic deregulation and trade liberalization)

Neo-liberalism spread in labor economics

Protective labor institutions seen by neo-liberal economists as "rigidities" in the labor market

In practice, neo-liberalism became a

**Global race to the bottom &
gave rise to Factory Asia**

neo-liberal globalization and global crisis of IR, employment

Erosion of post-WWar II Social Contract in OECD

Erosion of tripartism, w/ unionism steadily marginalized everywhere, labor market flexibility becoming the rule everywhere,

outsourcing (varied levels) subverting traditional concept of job security

Crisis of Industrial Relations

HRM overshadowing IR

In Asia: good jobs for a few, but many excluded (informals constitute 65 per cent of labor force!, large number of “informalized” formals)

Challenge: reversing & transforming neo-liberal paradigm of globalization

**Race to the Bottom should become Race to the TOP
ILO's DWAgenda – good starting point for a debate:**

- core labor standards**
- job creation for men & women**
- social dialogue**
- social protection for all**

However, ILO's campaign clear only on core labor standards – how to address job creation & social protection a big issue

More Closer Look : International Flows in Short-Term Capital and Labor

- World portfolio investment has grown even more. The major world financial markets are now so closely linked that they have virtually become one. The emerging capital markets of China and India have begun to attract large inflows. The amount of capital that can be moved around the world in an instant is at least a couple of trillions of U.S. dollars. Large financial institutions operate worldwide. (Exchange rates are now moved primarily by capital flows, especially short-term capital flows, rather than by trade flows or direct investment flows.)
- The labor force has become increasingly mobile. Foreign labor is very common in many countries, e.g., in Taiwan, in Hong Kong, in Germany, in the Middle East. And human capital in the form of skilled labor and professionals has become very mobile. There is now a world market in professionals such as accountants, engineers, scientists and managers.

The Unprecedented Growth in World Trade and Capital Flows is the Result of:

- The falling costs of transportation and communication—resulting from the declines in real telecommunication costs and shipping costs, coupled with the logistics technology revolution, and facilitated by the worldwide use of English as the medium of business communication.
- The reduction of barriers to international trade in goods and services and to international capital movements through the agreements on World Trade Organization (WTO) and various free trade areas (FTAs).
- De-verticalization or fragmentation of production—finer and finer intra-firm as well as inter-firm division and sub-division of labor around the world, through out-sourcing and specialization by enterprises in niches of core competence—internationalization of supply chains. A product may have gone through several different countries from start to finish.

The Unprecedented Growth in World Trade and Capital Flows is the Result of(Cont.):

- International trade permits greater specialization and the exploitation and realization of economies of scale and learning-by-doing by the individual firms. And with the growth of markets, integration as well as segmentation of markets become possible.
- The entry of new players into the global marketplace—China, India, Russia, Eastern Europe, Brazil—as both suppliers of exports and the demander of imports.
- Rising volumes of trade in previously non-tradable services (software-outsourcing, data processing, call centers, back offices)

Globalization is Enabled by the Information & Communication Technology Revolution

- The information and communication technology revolution:
- Caused large reductions in the costs of information transmission and analysis, information storage and retrieval, and communication;
- Increased significantly the timeliness and reliability of information—information is now available and transmitted accurately in real time;
- Greatly facilitated inter-firm and intra-firm coordination by reducing the costs of communication, monitoring, and control (geographical distance is no longer a barrier), and thereby lowered the explicit and implicit transactions costs of outsourcing.

Challenges of HR from Globalization are the Results of:

- Intensification of competition from both domestic and foreign firms for markets and for capital, human resources and other resources(e.g., oil, iron ore);
- Increased unpredictability (footlooseness of suppliers, customers and investors; external shocks) and decreased ability for risk diversification because of rising synchronization of business cycles around the world;
- The social costs of job displacements and disruptions can be high;
- The possibility of monopolization and cartelization of world markets; (Monopolization and cartelization are the natural outcomes of a completely free and unregulated (global) market economy. They tend to result in higher prices and poorer qualities for goods and services and inputs and less innovation.)
- The renewed rise of protectionism and isolationism as a reaction to globalization;
- For smaller economies, greater vulnerability to external disturbances.

The Competitive Advantages of Taiwan

- Maritime location;
- High savings rate;
- High investment in intangible capital (human capital, R&D capital, goodwill, brand names) since the late 1980s;
- Real wage rate flexibility—the annual year-end wage bonus system provides risk-sharing between capital and labor (and provides an incentive for hard work, reduces labor turnover and enhances the savings rate);
- The open economy.

The Competitive Disadvantages of Taiwan

- The domestic market is not large enough;
- Limited supply of skilled labor;
- Limited employment opportunities for unskilled labor;
- Unpredictability of government policy creates economic uncertainty, which in turn discourages long-term investments;
- The open economy.

Implications for Taiwan: Moving up the Value Chain

- Continuing the move up the value chain (from OEM to ODM).
- New York and Silicon Valley (and Hong Kong) have survived the out migration of its manufacturing jobs. Taiwan will be able to do the same. It should not fear “hollowing out.” The service sector in Taiwan will become even more important, with emphasis on high-value-added services— R&D, design, quality assurance, marketing, education, health care, creative industries such as advertising, marketing and design. It will be human-capital and skill-intensive.
- Staying upstream is the best protection against a potential trade war. No country will embargo another country’s imports if they are needed as critical components and parts for its factories.

Implications for Taiwan: Providing a Social Safety Net

- Because of the increased economic uncertainty caused by globalization, Taiwan should provide a social safety net without creating the disincentive to work, the disincentive to save, and the disincentive to invest. Taiwan has so far avoided the creation of a semi-permanent dependent class (as for example in Germany), but must remain vigilant.
- The social safety net should be compatible with long-term fiscal sustainability.
- Education is the most effective instrument of redistribution and poverty alleviation in the medium to long term.
- The financing of health care through a system of third-party payments in Taiwan encourages moral hazard and is not sustainable in the long run.
- The social safety net should be designed to help only those who are genuinely unable to help themselves. It should encourage citizens to be self-reliant, to take care of themselves if they are able to do so, and not to diminish the incentives to invest, save and work.

Implications for Taiwan: Providing Employment for the Displaced Workers

- In the long run, globalization should create winners everywhere. However, in the short run, there will be both winners and losers. The gains will exceed the losses, so that in principle it is possible to compensate the losers. In practice, compensating the losers requires specific policy measures.
- The possibility of internalization of the costs of adjustment (e.g., exporting textile machinery in exchange for increased imports of textiles; firms in exporting country assuming the responsibility for the displaced workers in the importing country).
- The government should provide temporary support for displaced workers.

Implications for Taiwan: Providing Employment for the Unskilled

- Given globalization, any job that can be moved to a lower-cost region has been or will be moved.
- The only unskilled jobs that cannot be moved away are tourism-related—hotels, restaurants, retail, and local transportation.
- In the short term, retraining and re-employment of unskilled labor.
- In the medium term, providing new employment opportunities, e.g., in the tourism industry.
- In the long term, investment in human capital.
- The problem will be solved in one generation.

VI. CONCLUSIONS

Conclusion

- Human capital is the very foundation of other capitals
- The dynamics of human capital + structural capital + social capital
- Individual talent → firm level HC → industry level HC → national level HC → regional level HC

HC creation and accumulation

- Individual talent
 - –Recruiting & selection
 - –Training & development
 - –Retention
- Firm level HC
 - –Leadership
 - –Policy
 - –Reward system
 - –Knowledge management

- Industry level HC
- –Networking
- –Collaboration
- –Knowledge sharing
- National level HC
- –Public policy
- –Support of Ministry of Education
- Regional level HC
- –.....