

CDDRL, Stanford:
TPP and Taiwan's Future
Development Strategy

Taiwan's Next Phase of Development

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Introduction

- Since the second world war, the Taiwan economy has grown at the rate of 7.3% (1952-2012), starting from an agrarian economy to become a world player in the ICT sector.
- Industrial policy has played an important role in the economy's rapid growth. Although there were successes and failures in the government's micro-management of the economy (picking winners and losers), the major thrust of the industrial policy, liberalization and globalization, has contributed significantly to the success of the economy.

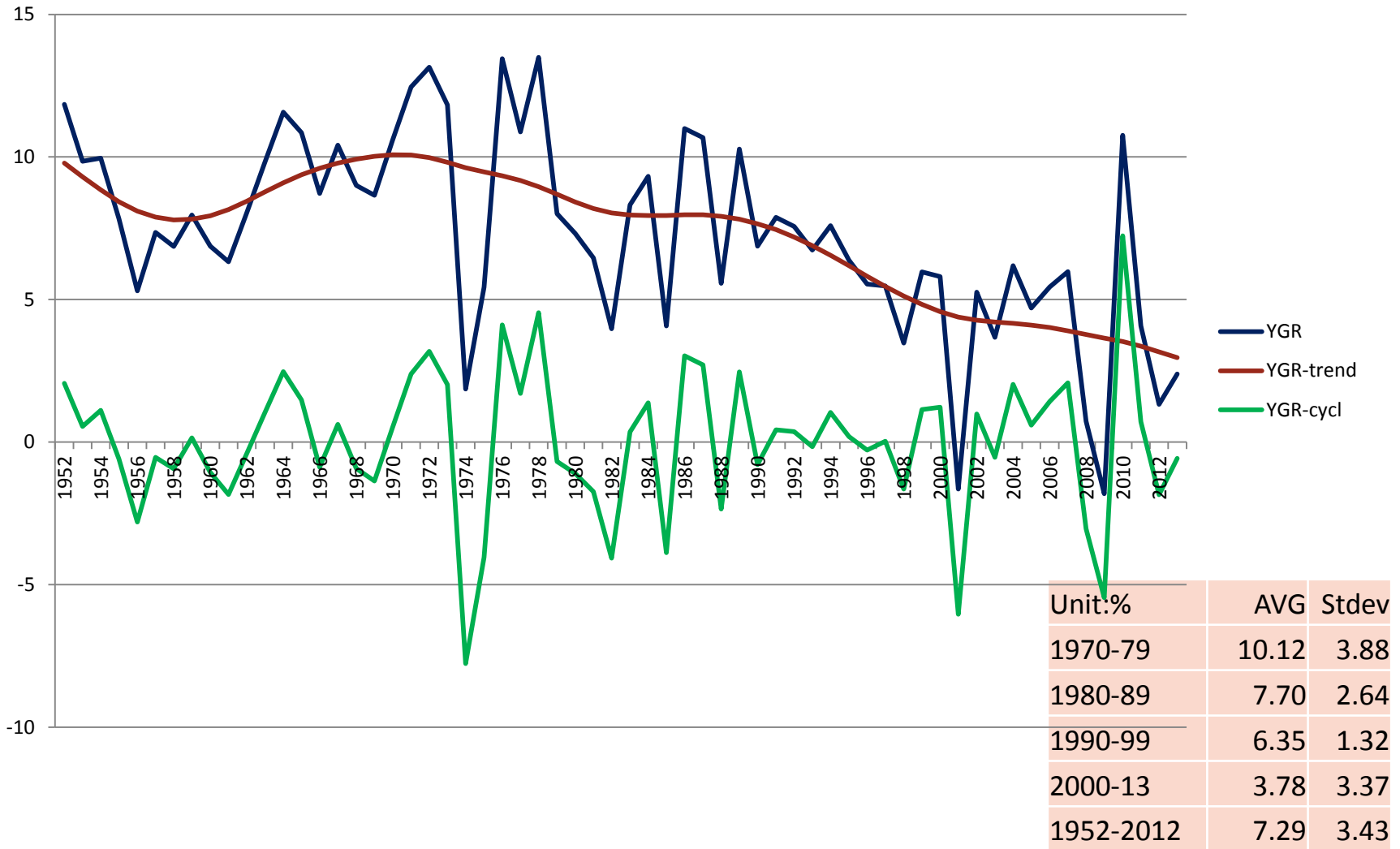
Introduction (cont'd)

- However, the **service sector** has been behind the manufacturing sector in liberalization and globalization. As a result, its productivity growth has been lower than the manufacturing sector.
- Productivity growth in the service sector has a much larger effect than in the manufacturing sector on the economy.
- Two characteristics of the Taiwan economy have contributed to the volatility of growth rates in recent years: Specialization of production in ICT and concentration of export markets in China and ASEAN countries.

Introduction (cont'd)

- In the next phase of development, the upgrading of the service sector plays an important role, and the key to upgrading the service sector is to extend liberalization and globalization to the sector, using the Trans Pacific Partnership (TPP) as a norm and as a way to diversify its export markets.

Growth of the Taiwan Economy



Current State of the Taiwan Economy

- The role of the Manufacturing Sector in the Economy
 - The manufacturing sector accounts for 24.24%, while the service sector 69.15% , of aggregate GDP;
 - 50.91% of export orders received by Taiwan are outsourced overseas; 47.36% of export orders went to China;
 - 84.56% of **ICT** export orders received by Taiwan are outsourced overseas; 82.61% to China.

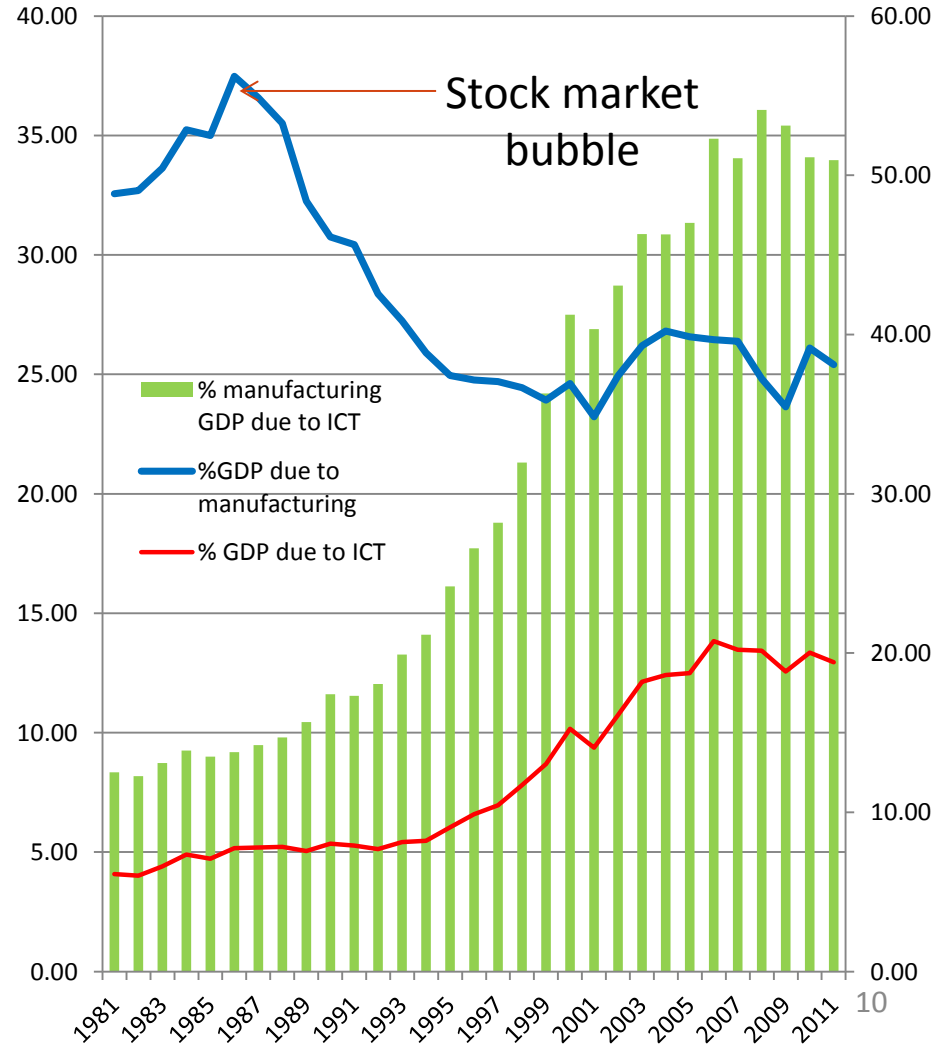
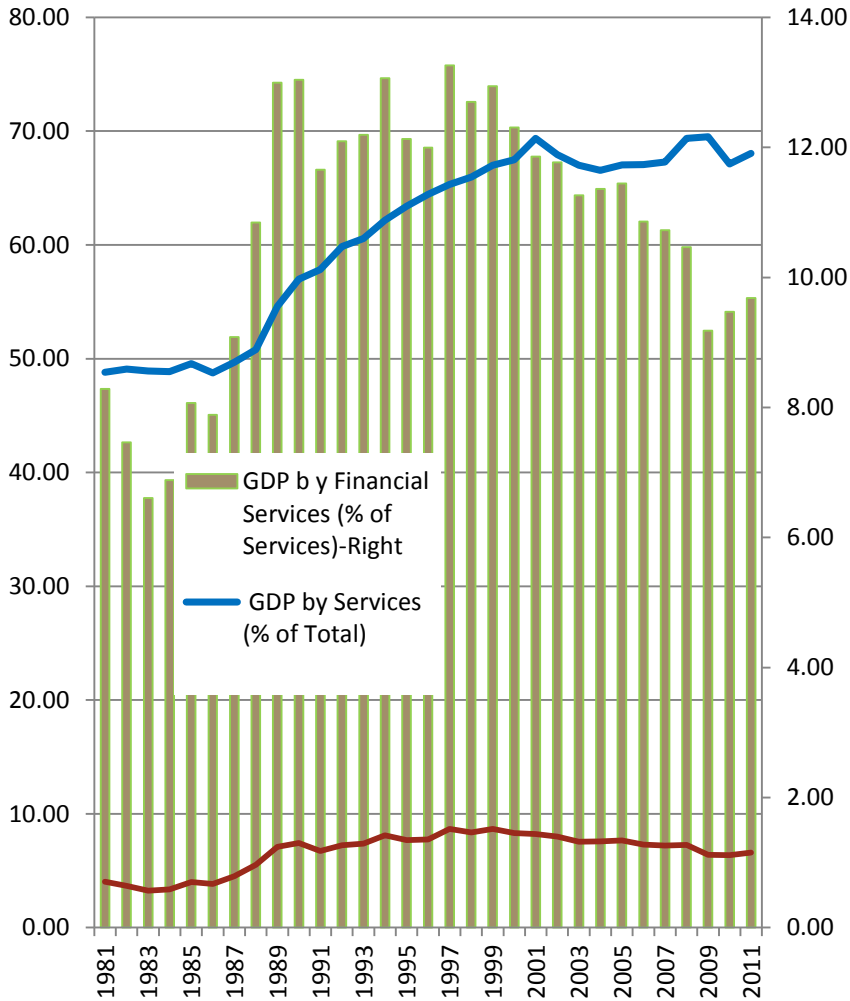
Current State of the Taiwan Economy

- The role of the ICT sector in the economy: Highly capital and technology intensive, and highly **cyclical**.
 - The ICT sector accounts for 50.94% of manufacturing output (2011);
 - ICT exports account for 40.06% of total exports (2012);
 - Declining value-added: The percentage of value added in final output value declined from 33.33% in 2003 to 29.20% in 2011;
 - Stock value of ICT firms accounts for around 50% of the market value of the Taiwan Stock Exchange (2012);
 - Job-creation effect is small: The percentage of export orders outsourced overseas is as high as 84.56% (82.61% to China).

Current State of the Taiwan Economy

- Concentration of Export Markets: China and ASEAN 6 account for a large share of exports-
Need for market diversification.
 - China (HK included): 39.4% (2012) ; Taiwan's market share in China's import markets declined from 10.6% in 2007 to 7.3% in 2012;
 - ASEAN Six: 18.5% in 2012, up from 12.2% in 2000. (FDI-led growth in exports);
 - **TPP** economies: 31.98 (2012); 45.41% (2000);
 - **RCEP** economies: 58.32% (2012); 30.95% (2000);
 - US: 10.9% (2012); 23.4% (2000).

Manufacturing and Services Sectors



Manufacturing location of Export Orders (2012)

	Manufacturing location		
	Taiwan	Overseas	
			Mainland China
Total	49.09	50.91	47.36
Chemicals	79.43	20.57	13.22
Plastics, Rubber and Articles thereof	81.3	18.7	15.39
Electronics	47.64	52.36	44.92
Machinery	81.3	18.7	14.33
Electrical Products	32.16	67.84	65.27
ICT Products	15.44	84.56	82.61
Precision Instruments	43.49	56.51	53.73

Challenges Ahead

- Declining investment and foreign direct investment: Taiwan does well in competitiveness reports such as WEF(11th), IMD (13th) and BERI(3rd) but, in recent years, fails to attract FDI or increase domestic investment.
 - The percentage of private investment in GDP declined from 17.37% in 2007 to 15.23% in 2012;
 - The amount of inward FDI declined from USD 15.36 Million in 2007 to USD 5.56 Million in 2012;
 - Cross-Strait Economic Cooperation Framework (ECFA) has not helped attract FDI : Investment neutral.

Challenges Ahead

- Cross-strait economic relations
 - Turning from cooperation to competition: Chinese firms are increasingly producing own high-end parts and components;
 - Rising wages in China: Declining advantage of China as a manufacturing base;
 - Uncertainty of the transformation of China from the world's factory to the world's market.
- Population aging
 - Challenges: Heavy burden of social insurance expenditures;
 - Opportunities: Business opportunities from population aging.

Industrial Policy

- Successes and failures in micro-managing industrial policy: Government role in picking winners and losers
 - Petro-chemical, **semi-conductor**;
 - X Auto manufacturing, mini-computer.;
 - △ Biotech.
- Infrastructure and capacity building
 - Hsin-Chu Science Park & Industrial Technology Research Institute (ITRI) : The “clustering effect” leads to the most complete ICT supply chain.
 - Education and manpower training.
 - Tax incentive: Investment tax credit and **Special tax rate on employee stock bonus** contributed to high-tech growth

Industrial Policy

- Market reform and globalization
 - Market liberalization: More rigorous in the manufacturing sector than in the service sector. The service sector is still highly regulated and not fully globalized.
 - Privatization of public enterprises: State-controlled banks still account for 50% of market share; The government still owns the China Petroleum Corporation, Taiwan ; Taiwan Power Company ; Taiwan Sugar Corporation, etc.

Industrial Policy

- Market reform and globalization
 - Scale economy: Market access through globalization allows firms to take advantage of scale economy. Creation of some world-class corporations (Formosa Plastic, TSMC , Hong-hai for example). Lags behind Chinese or Korean companies. Find vitality in SMEs.
 - Technology transfer: Inward FDI contributed to technology transfer and thus industrial upgrading. Declining inward FDI reduces technology transfer or leads to new way of technology cooperation?

Next Phase of Economic Development

Market-led Growth

- Key to economic growth: Upgrading of the competitiveness of the service sector, particularly financial services, health care, tourism, and manufacturing service.
 - One percent of productivity increase in the service sector would have roughly the same impact as 2.75 percent of productivity increase in the manufacturing sector on the economy .
 - TPP standards as a norm for liberalization and globalization
 - Overcome Taiwan's disadvantage relative to Korea in attracting FDI

Next Phase of Economic Development: Market-led Growth

- Strengthening of ICT Supply Chain:
 - Support Innovation through R&D
 - Scope economy over scale economy: Vitality and innovation of SMEs- (Note: TPP support of SMEs)
- Exploring the Externality of ICT : Integrating ICT into traditional industries. (TPP helps traditional industries.)
 - Electronic auto parts ;
 - Green energy: Energy saving and solar power.
- Opportunities from population aging:
 - Biotech : Taking off after more than 20years of “incubation.”
 - Health care
 - Medical Devices

Next Phase of Economic Development

Changing Role of the Government

- Micro-managing industrial policy: The government no longer has advantage in picking winners and losers. Knowledge and expertise are in the private sector.
- Continued infrastructure and capacity building:
 - Education and recruiting of talent;
 - Infrastructure for the next phase of development.
- Improving investment climate: The last mile in improving investment climate is to remove red tape (e.g., environment impact analysis and land acquisition)
- Export market diversification through FTAs, TPP, RCEP
 - TPP to overcome political reality.

Next Phase of Development:

The Role of TPP

- Adopting TPP standards to speed up the upgrading the competitiveness of the economy, particularly the service sector: External pressure helps improve market liberalization
 - Small- and Medium-Sized Enterprises. Encouraging small- and medium-sized enterprises to trade internationally.
 - Comprehensive and robust market liberalization
- Export market diversification

Conclusion

- Taiwan's next phase of development lies in upgrading the service sector, and exploring the externality of ICT, vitality of SMEs, the opportunities from population aging.
- The role of the government in the next phase of development is not in picking winners and losers but in upgrading infrastructure and capacity building, improving productivity of service sector, improving investment environment and expanding exports market.
- Participation in TPP helps expand exports market and TPP standards can serve as a norm for upgrading the competitiveness of the service sector.

Appendix

Taiwan's Trade with TPP Economies

	TPP/Taiwan Total			
Unit: %	Exports	Imports	Total Trade	Trade Balance
2000	45.41	57.72	51.33	-109.05
2005	33.51	47.34	40.14	-126.25
2010	30.12	42.99	36.27	-108.24
2011	31.26	40.25	35.55	-63.07
2012	31.98	38.40	35.02	-24.58

Taiwan's Trade with RCEP Economies

	RCEP /Taiwan Total			
Unit: %	Exports	Imports	Total Trade	Trade Balance
2000	30.95	55.85	42.92	-281.47
2005	48.60	58.40	53.30	-64.59
2010	56.38	57.78	57.05	41.27
2011	56.65	57.29	56.95	49.95
2012	58.32	54.60	56.56	91.06

2022:

The age of declining population

- 1963: Population 12.70m. Taiwan, worried about **population explosion**, started “Family Planning” Program
- 2013: Population 23.38m. Taiwan, worried about **declining population**, is contemplating relaxation of its immigration law
- 2015 : Disappearing “**Population dividends.**” The working population begins to fall from a peak of 17.38m
- 2022: Population 23.66 m. Taiwan begins an age of **declining population.**

The ratio of the elderly population to the working age population



Population age 65 and over



Working-age population (15~64)

