

# National Health Insurance & Elderly Care in Taiwan

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Term Care Costs of the Elderly

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# The State of Care in Taiwan

# Profile of Taiwan (2007)

- Population: 23.0 million
- Land area: 36,190km<sup>2</sup> (14,000 mile<sup>2</sup>)
- Population density: 634 per km<sup>2</sup>
- Population aged over 65 : 10.2%
- GDP per capita : US \$16,855
- NHE as % of GDP: 6.13%



*Sources: Ministry of Interior, Directorate-General of Budget Accounting and Statistics, Department of Health*

# Health Indices (2007)

- Crude Birth Rate: 8.9 ‰
- Crude Death Rate: 6.2 ‰
- Infant Mortality Rate: 4.7 ‰
- Natural Increase Rate: 2.8 ‰
- Maternal Mortality Rate: 6.9 ‰/1000
- Life Expectancy: 75.1 Male  
81.9 Female



*Sources: Ministry of Interior, Department of Health*

# Public/Private Mix of Providers (2006)

	Public	Private	Total
<b>Hospitals</b>	<b>79</b> (15%)	<b>463</b> (85%)	<b>542</b> (100%)
<b>Clinics</b>	<b>427</b> (2%)	<b>17,311</b> (98%)	<b>17,738</b> (100%)
<b>Beds</b>	<b>33,875</b> (30%)	<b>78,098</b> (70%)	<b>111,973</b> (100%)

# Milestones Toward a Welfare State

- 1950 Labor Insurance (Lump-sum payments)
- 1958 Government Employee Insurance
- 1985 Farmer Insurance
- 1990 Low-income Household Insurance
- 1995 National Health Insurance
- 2008.10.1 National Pension
- 2009.1.1 Labor Insurance (Superannuation)



The Accomplishments of NHI:  
A Program  
that Defies the  
“Conventional Wisdom”

# Key Features of Taiwan's NHI

- Mandatory and universal enrollment
- Government as the Single-payer
- Premium based on payroll, shared by the employer, the employee and the government
- Comprehensive and uniform benefit package for all
- Fee-for-service and case payment under the global budget payment scheme
- Very low administrative cost (1.6 % of medical cost)

# The “Conventional Wisdom”

- You can not have these things in one program:
  - Universal coverage
  - Comprehensive benefits
  - Freedom of choice
  - Cost containment

# Major Accomplishments of NHI

- Universal coverage
- Full-range benefit package reaches every corner
- Freedom of choice on providers
- Affordable cost
- Assured quality of care
- State-of-the-art managerial capabilities
- High satisfaction rates
- Worldwide reputation

# Universal Enrollment: Assistance to the Disadvantaged

NHI protecting umbrella for the disadvantaged



**Premium subsidies**



**Statutory Subsidies**

**From Central government**

**From Local governments**

**Assistance measures  
for overdue payments**



**Relief Fund Loans**

**Payment Installments**

**Premium sponsorship  
referrals**

**Medical  
Assistance**



**Guaranteed  
emergency  
medical care  
service**

**Co-payment  
Exemption**

# Comprehensive & Uniform Benefit package

- Inpatient care
- Ambulatory care
- Laboratory tests
- Prescription drugs and certain OTC drugs
- Dental services
- Traditional Chinese medicine
- Day care for the mentally ill
- Home care

# Development of Payment System

1995 - Fee for Service

1997 - Case Payment, currently 53 items

1998 - Global Budget Payment Scheme

2001 - Quality Based Payment Scheme

2004 - Resource-Based Relative Value Scale  
System (RBRVS)

In the pipeline – Tw-DRGs

# Care that Reaches out to Every Corner

- 48 IDS (Integrated Delivery System) plans to improve services in remote mountainous areas and offshore islands.
- Telemedicine & helicopter service in virtually every islet

# Freedom of Choice

- Single payer – no choice of the carrier, yet...
- Unlimited choice of providers – 18,000 facilities to choose from, little barriers to specialists and medical centers.

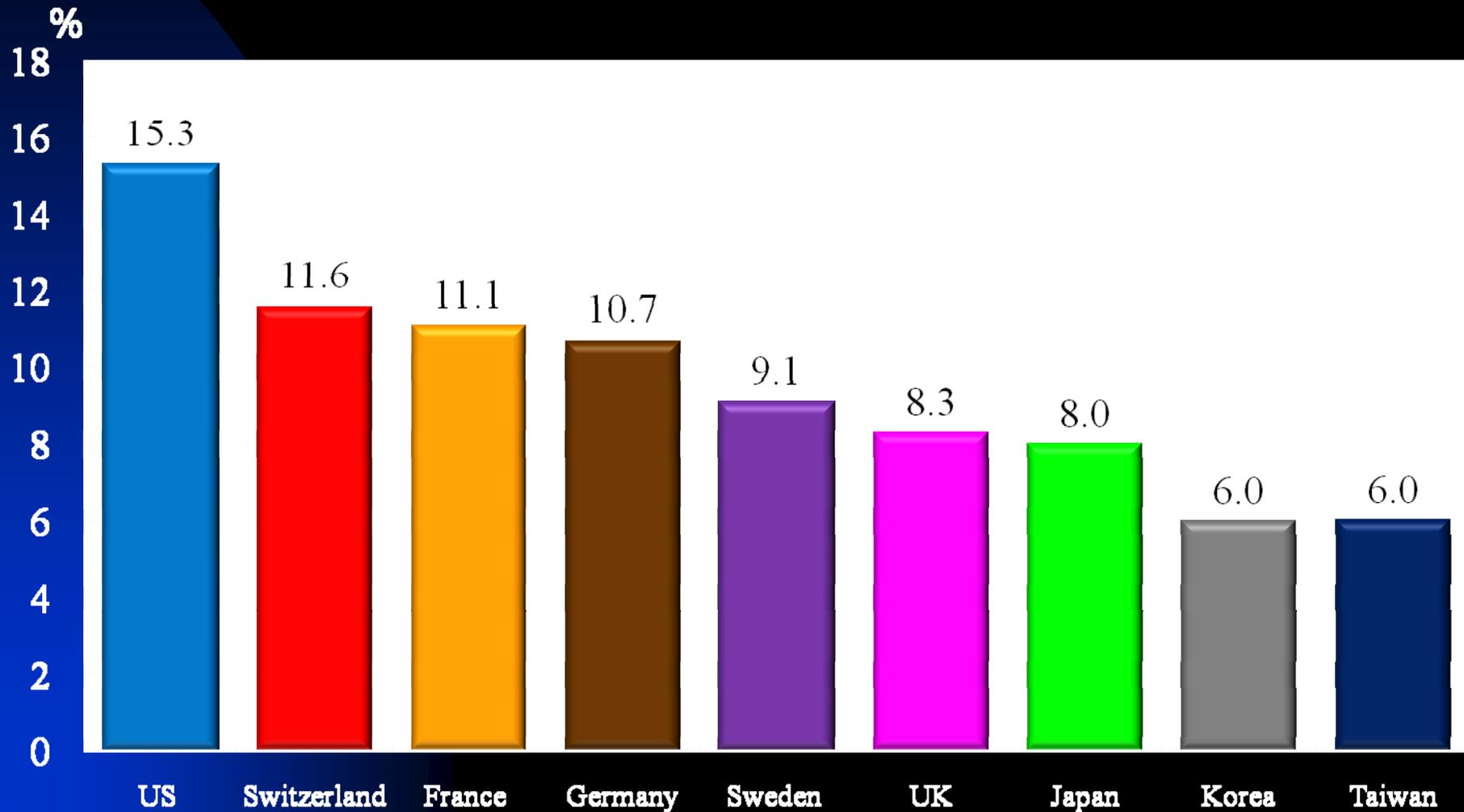
# Waiting Lines?

- No waiting lines as defined in other (western) countries...Only “frictional waiting time.”
- People tend to rush to the ER of the major medical centers, and those major hospital won't turn them away.
- May have to stay in the ER for a couple of days.
- Physicians and surgeons work very long hours.

# Rationing of Care?

- No discrimination based on age or anything. (Everyone in need gets a dialysis regardless of the age.)
- What matters is the core value of taking care of the fragile and the elderly, and leave the financial matter with us.

# Total Health Expenditure as % of GDP (2005)



Sources: OECD Health Data 2007, Taiwan DOH

# Acceptable Quality

*(Comparison of Organ Transplant Survival Rate, 2001-2004)*

	No. of Cases	3 Months Survival Rate			1 Year Survival Rate			3 Years Survival Rate		
		Taiwan	US		Taiwan	US		Taiwan	US	
			dead	living		dead	living		dead	living
Kidney graft	686	<b>98%</b>	97%	99%	<b>96%</b>	95%	98%	<b>92%</b>	88%	94%
Liver graft	402	<b>91%</b>	92%	93%	<b>88%</b>	87%	87%	<b>84%</b>	79%	78%
Heart graft	212	<b>87%</b>	91%		<b>79%</b>	86%		<b>66%</b>	79%	
Lung graft	45	<b>58%</b>	90%		<b>40%</b>	80%		<b>19%</b>	62%	
Kidney and heart graft	7	<b>71%</b>	98%		<b>71%</b>	92%		<b>71%</b>	78%	

# State-of-the-art Managerial Capabilities: The Smart NHI IC Card

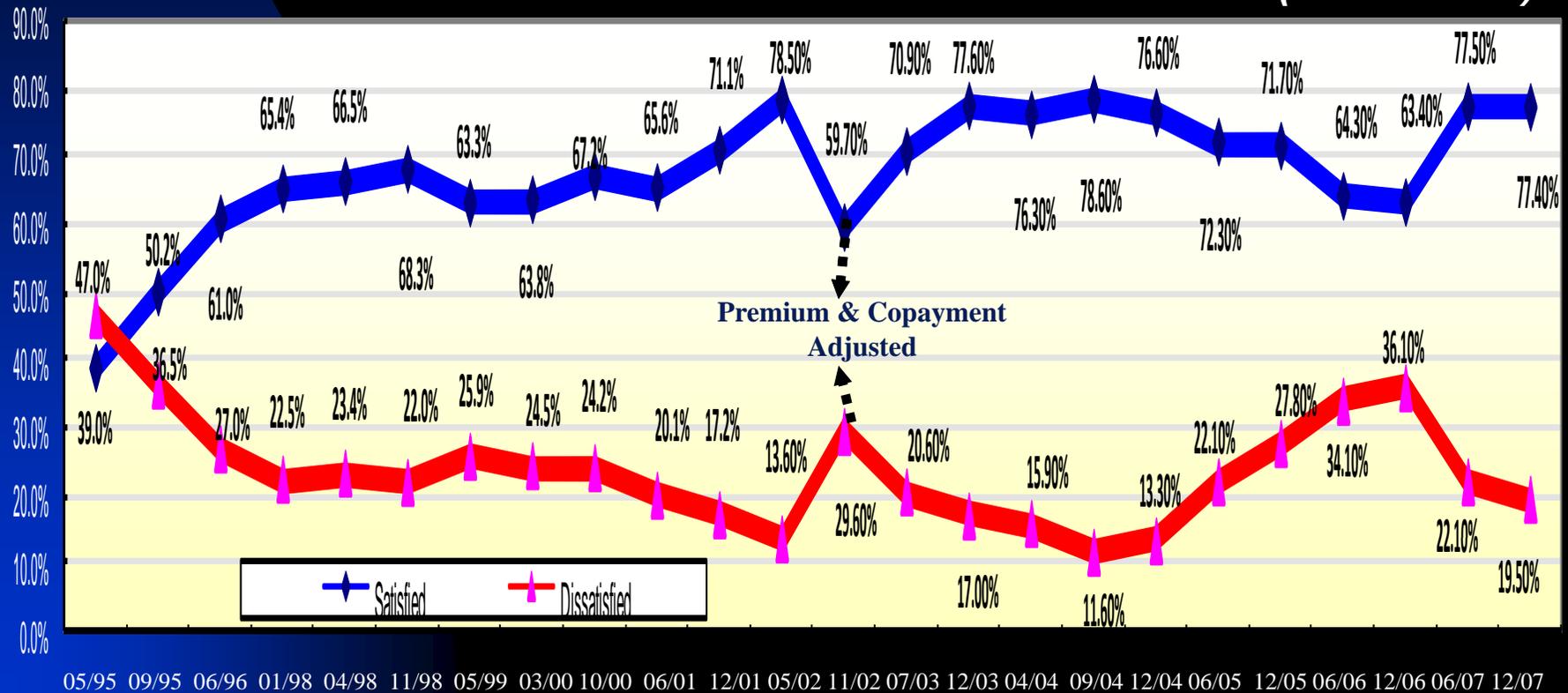


# State-of-the-art Managerial Capabilities: Applications of IC Card

- Utilization monitoring
- Surveillance of public hazards, such as epidemics
- Prediction of point values
- Anti-fraud profile analysis

# High Satisfaction

(1995~2007)



# Reputation Worldwide

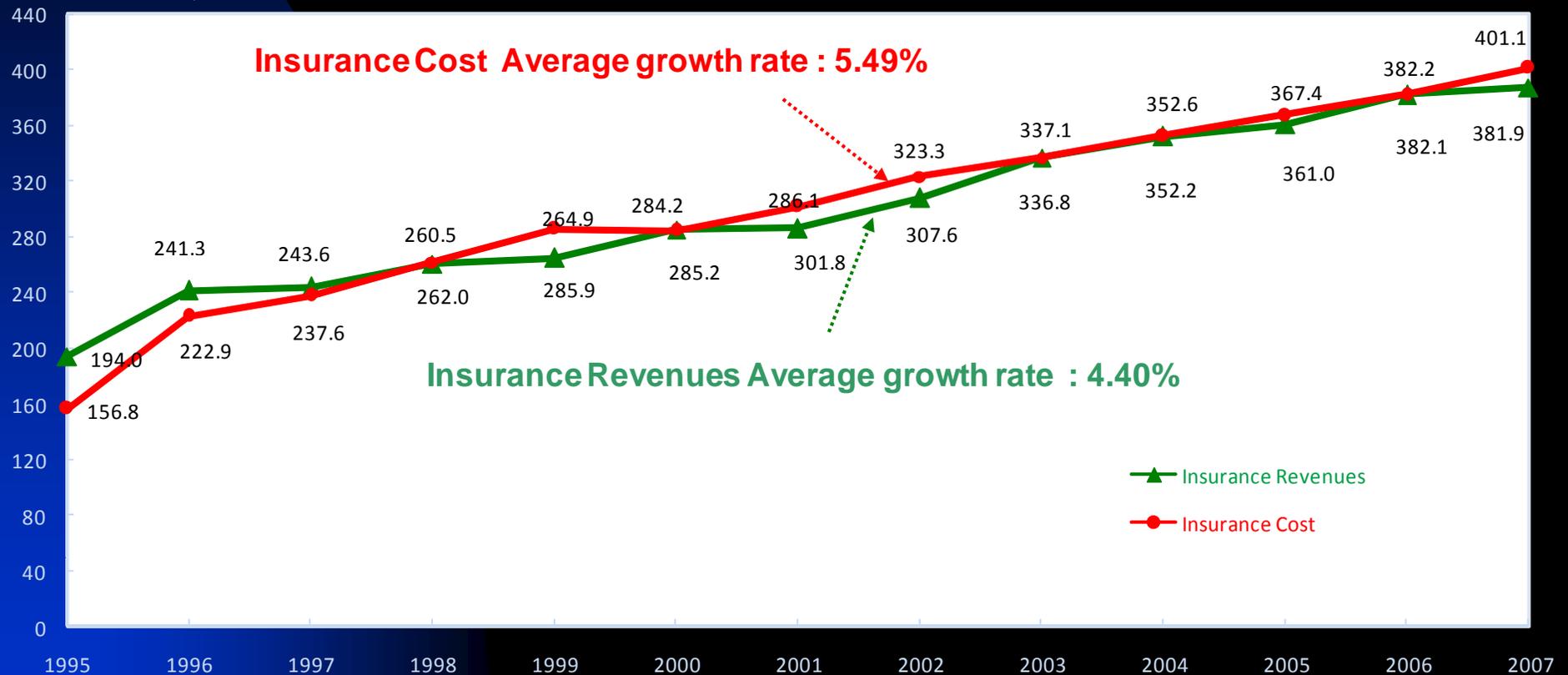
- Academic journal articles and Media coverage worldwide
- ABC prime time news covered as the title “ A Health Utopia”
- Nobel Laureate in Economics Professor Paul Krugman published an article “Pride , Prejudice, Insurance” in New York Times
- Recently featured by the “Frontline” of PBS – “Sick Around the World”
- Training programs for Indonesia, Mongolia, Saudi Arabia, Thailand.

# Single-Payer System—

- Serves as a platform for pooling all risks, and is conducive to social justice, which then serves as the cornerstone of solidarity.
- Serves as a platform for pulling together dollars of various sources, and is facilitative for income redistribution
- Generates a single data warehouse for further applications
- Very low administrative cost
- State as a monopolistic buyer to co-opt the medical profession

# Trend of NHI Financial Status

Unit: NT\$bn



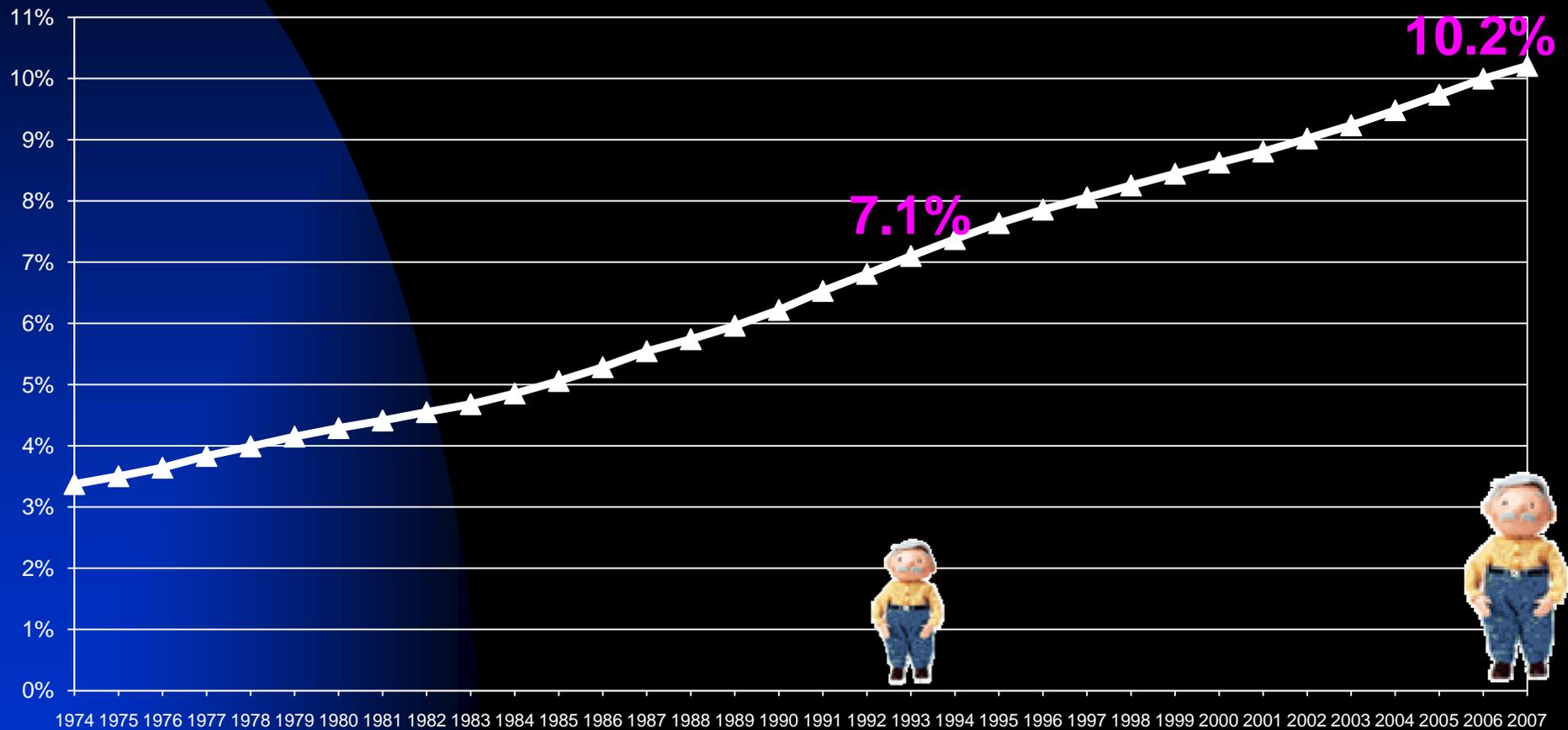
# Making Both Ends Meet

- Raise the tobacco surtax from NT\$10 to NT\$20;
- The 1.5 Generation of NHI: Go after all of your incomes: Payroll-based premiums won't grow as the economy does.
- Would it be possible to part with services of LTC nature?



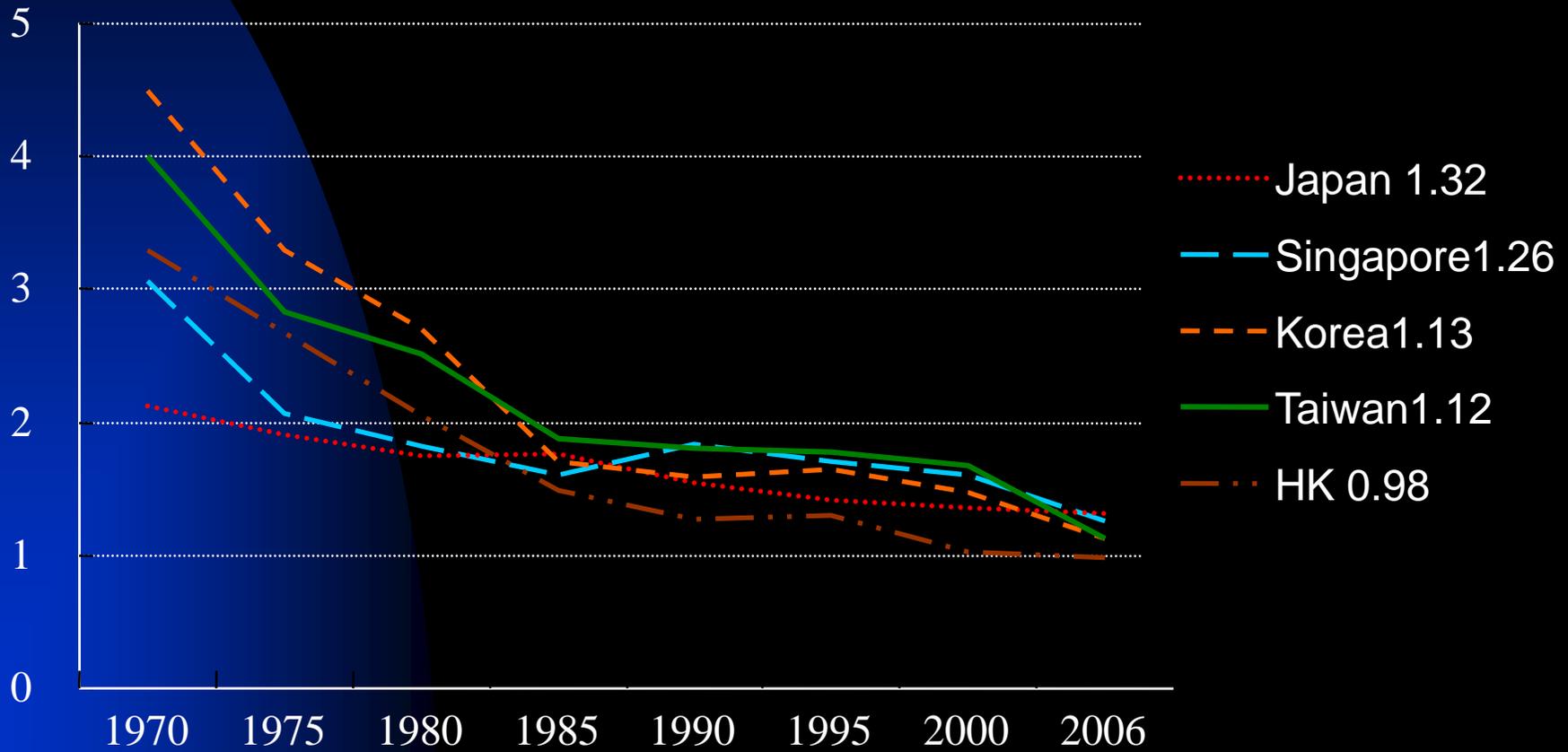
# Aging in Taiwan

# Percentage of people aged 65+

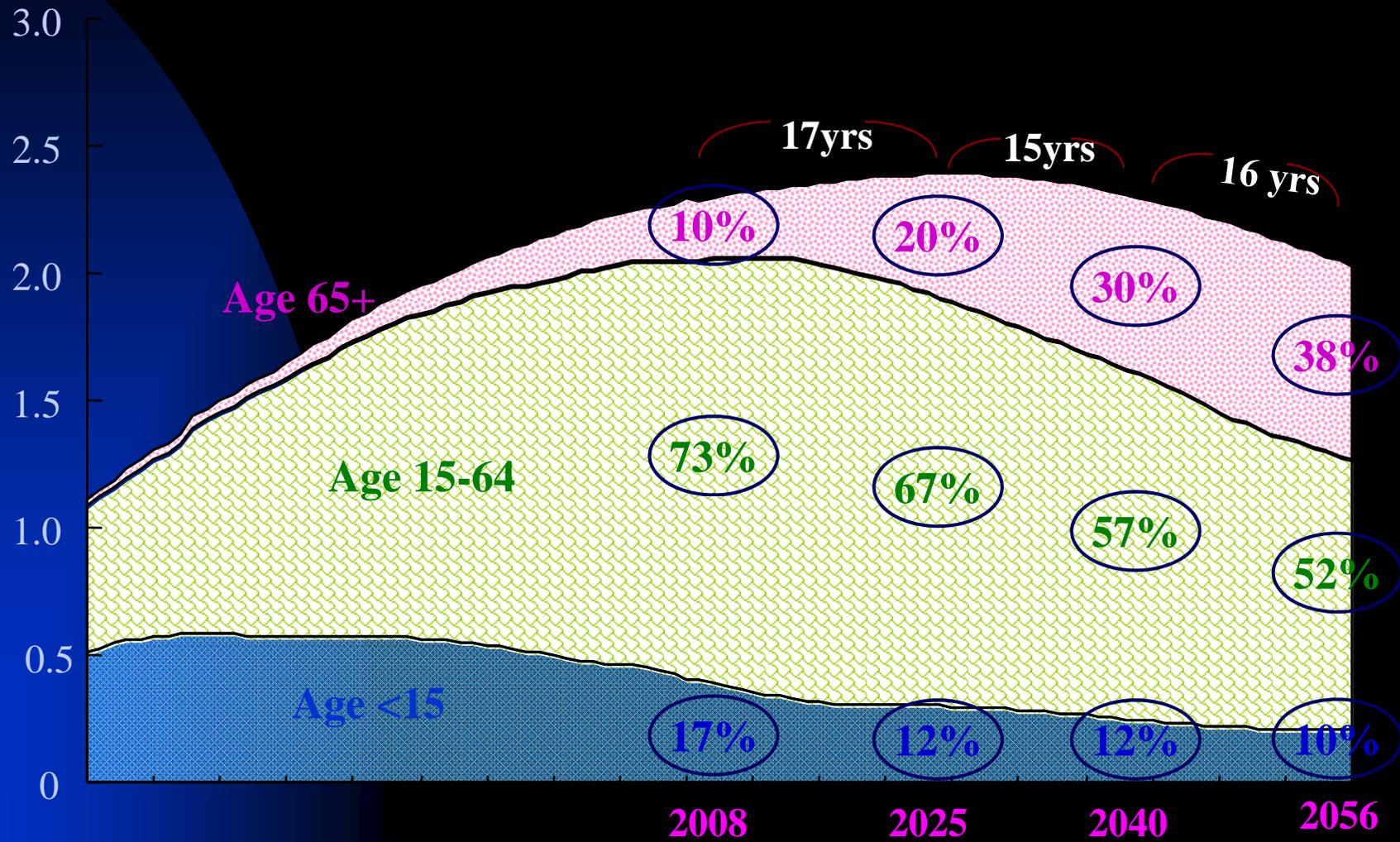


*Data Source: Taiwan Ministry of the Interior*

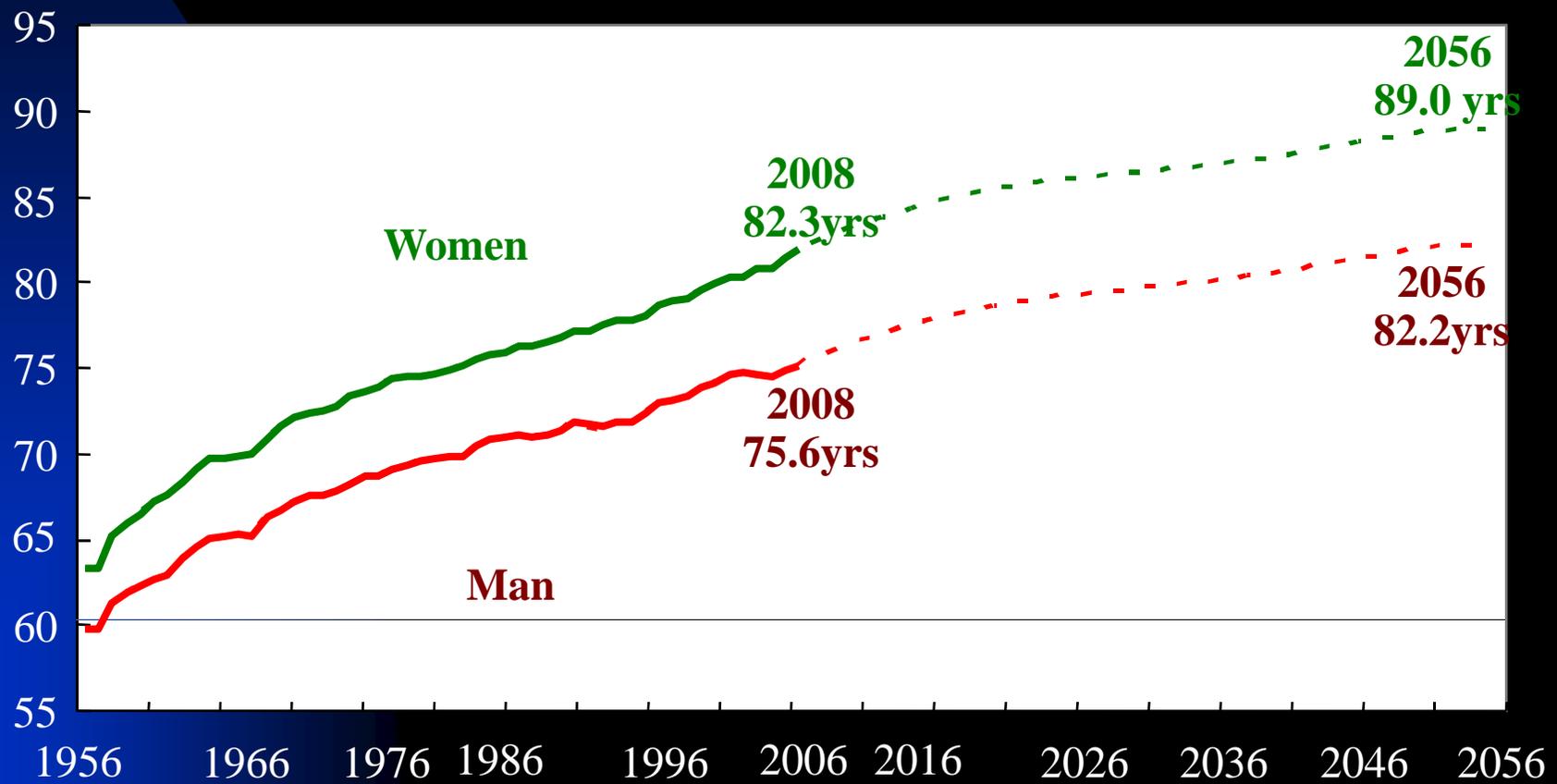
# Fertility Rates of Selected Countries



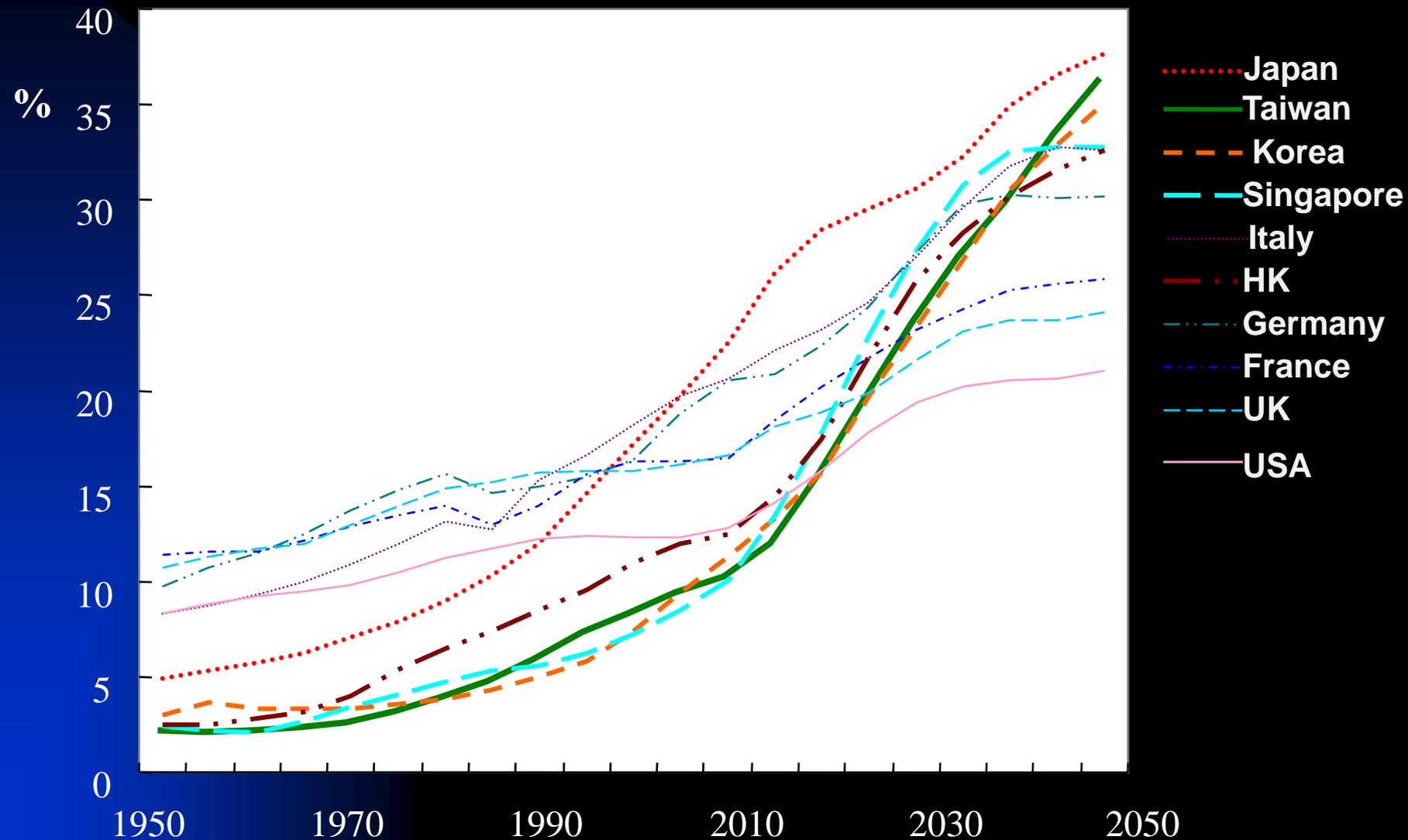
# Future Population of Taiwan by Age



# Average Life Expectancy

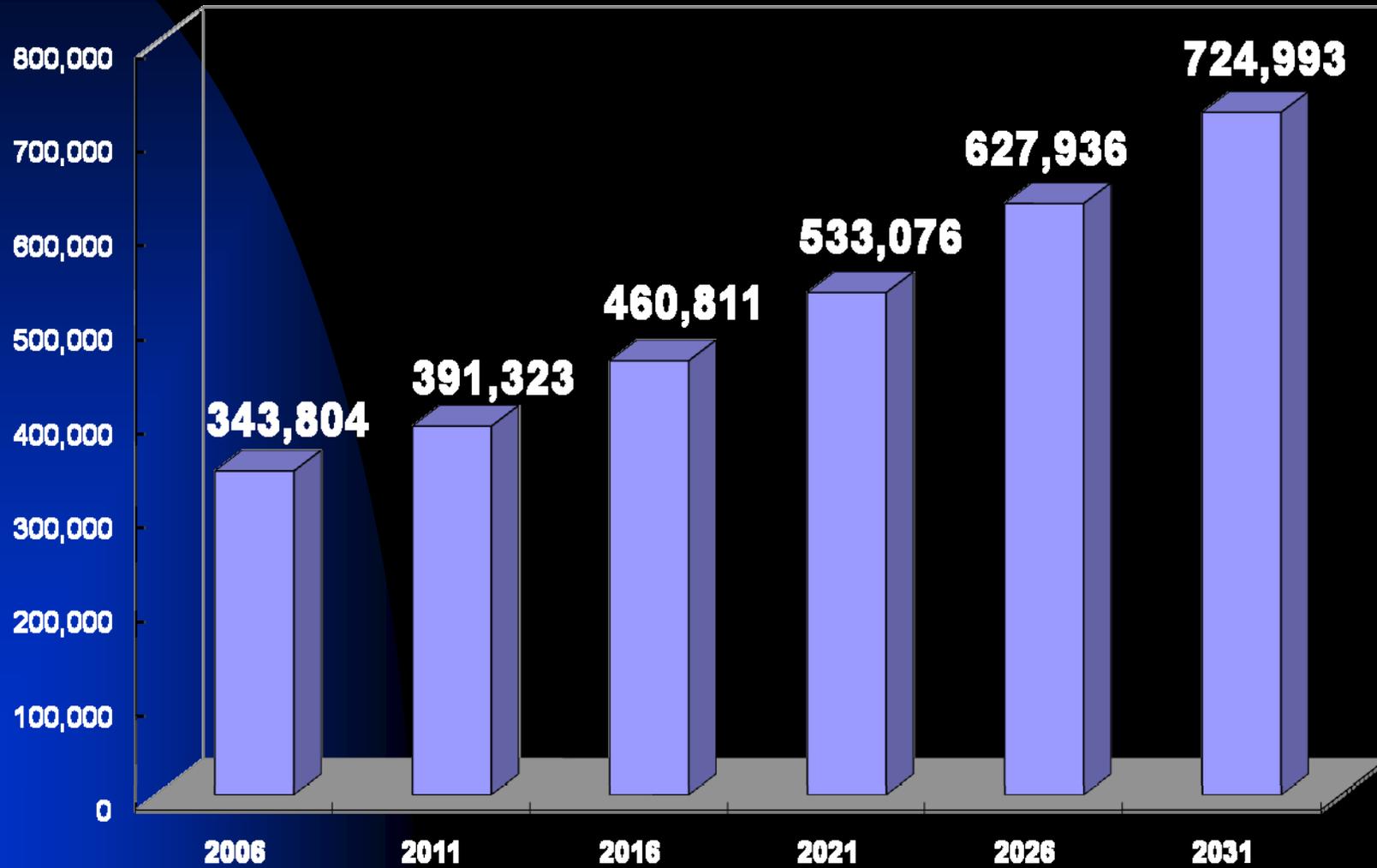


# Percentage of population aged 65+ in Selected Countries



Data Source: United Nations, World Population Prospects : The 2006 Revision.

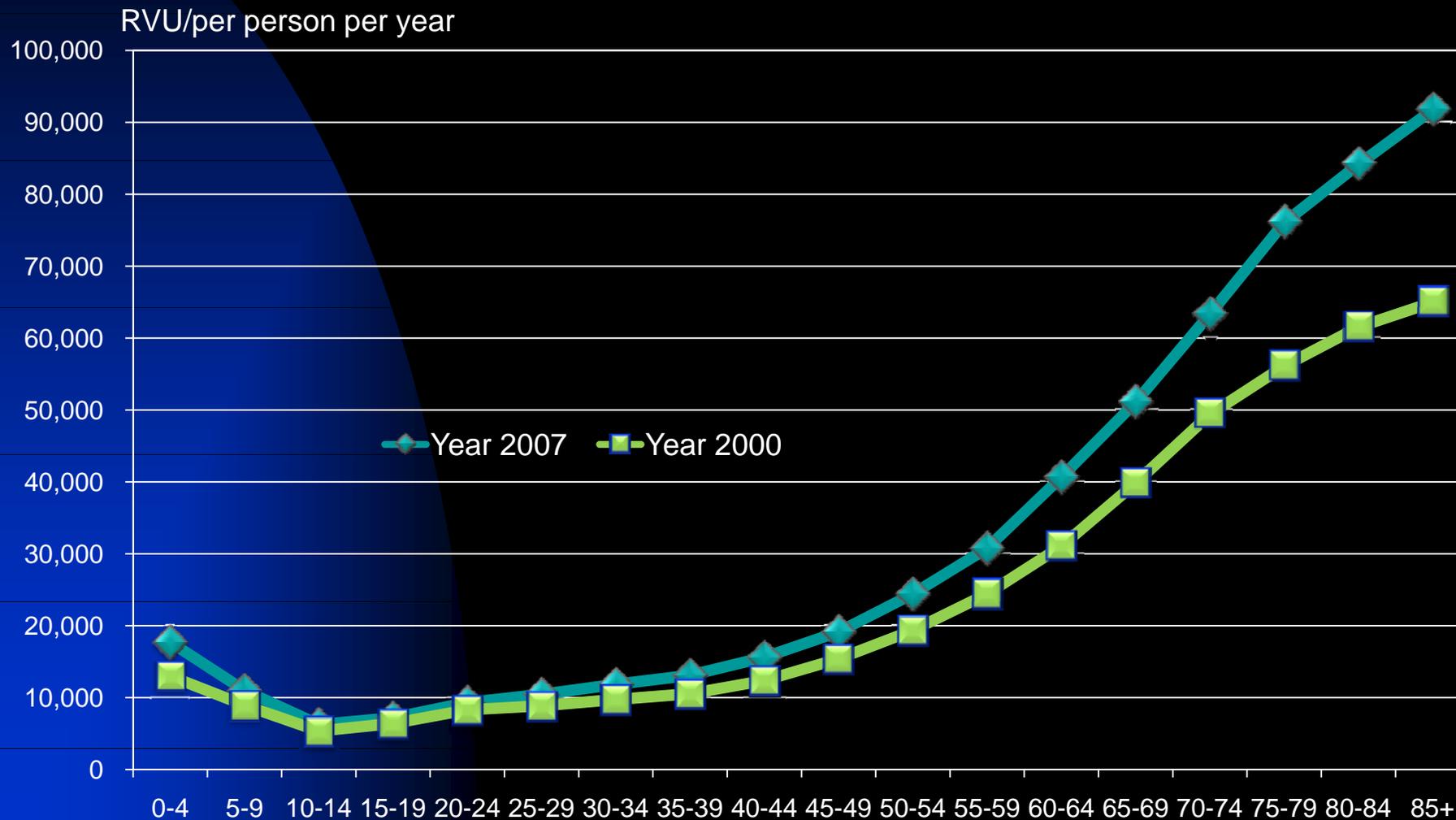
# Persons in need of LTC





## The NHI & Elderly Care in Taiwan

# Medical Expenditure Per Capita by Age Groups (2000 Vs. 2007)



*Data Source: National Health Insurance Annual Statistical Report*

# Prevalence of Selected Chronic Diseases

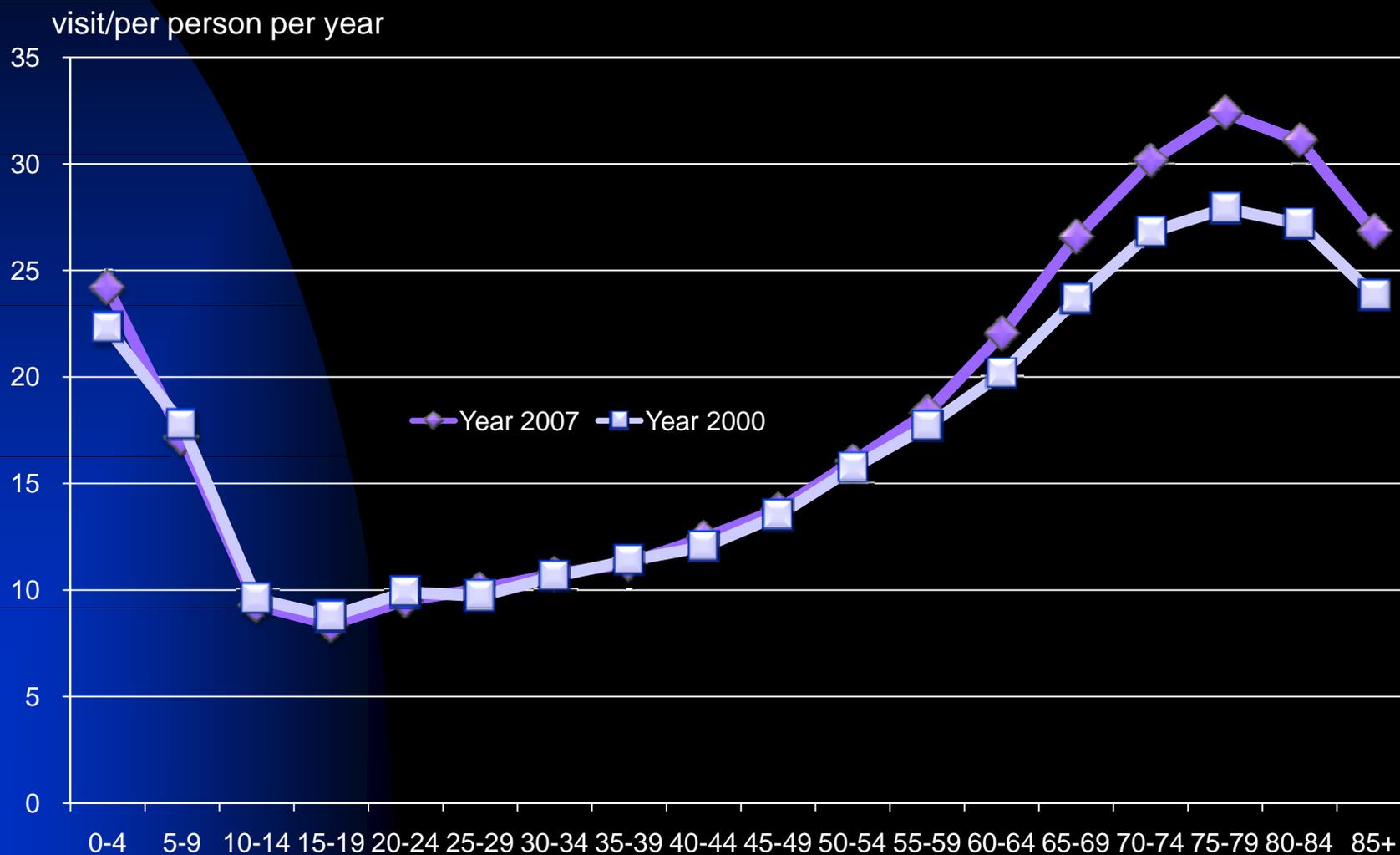
		1998	2001	2004	2007	98-07
Hypertension	401-405	44%	46%	50%	52%	8%
Arthritis	714,715	14%	22%	26%	26%	12%
Diabetes	250	18%	19%	21%	22%	5%
Heart Problems	410-414,4151,420-422,425	22%	21%	21%	20%	-2%
Dementia	330,331,290	3%	4%	5%	5%	3%

# Prevalence of Selected Chronic Diseases

	Period Covered	Arthritis	Heart Problem	Dementia	Diabetes	Hypertension	Obesity
<b>Taiwan</b>	<b>98-07</b>	<b>+12.2%</b>	<b>-2.1%</b>	<b>+2.6%</b>	<b>+4.6%</b>	<b>+7.9%</b>	..
Austria	98-03	+0.3%	+0.9%	-1.4%	+6.8%	+3.3%	..
Belgium	97-04	+0.1%	+0.3%	..	+5.1%	+3.2%	+1.1%
Canada	96-03	+1.6%	+3.0%	..	+3.7%	+3.9%	+2.9%
Denmark	87-05	..	..	..	+3.3%	..	+1.6%
Finland	80-00	-0.6%	..	..	+0.4%	+0.7%	+1.4%
Italy	91-00	+2.3%	+1.1%	..	+0.6%	+6.3%	+3.0%
Japan	89-04	+1.4%	+2.4%	+5.4%	+5.3%	+1.0%	..
Netherlands	90-00	+1.8%	+3.0%	..	+1.2%	+1.8%	+3.8%
Sweden	80-04	..	..	+1.3%	+0.9%	+0.9%	+2.0%
United Kingdom	94-03	..	0.0%	..	+7.4%	..	+3.2%
United States	92-02	+0.6%	-0.3%	..	+2.2%	+1.5%	+3.5%

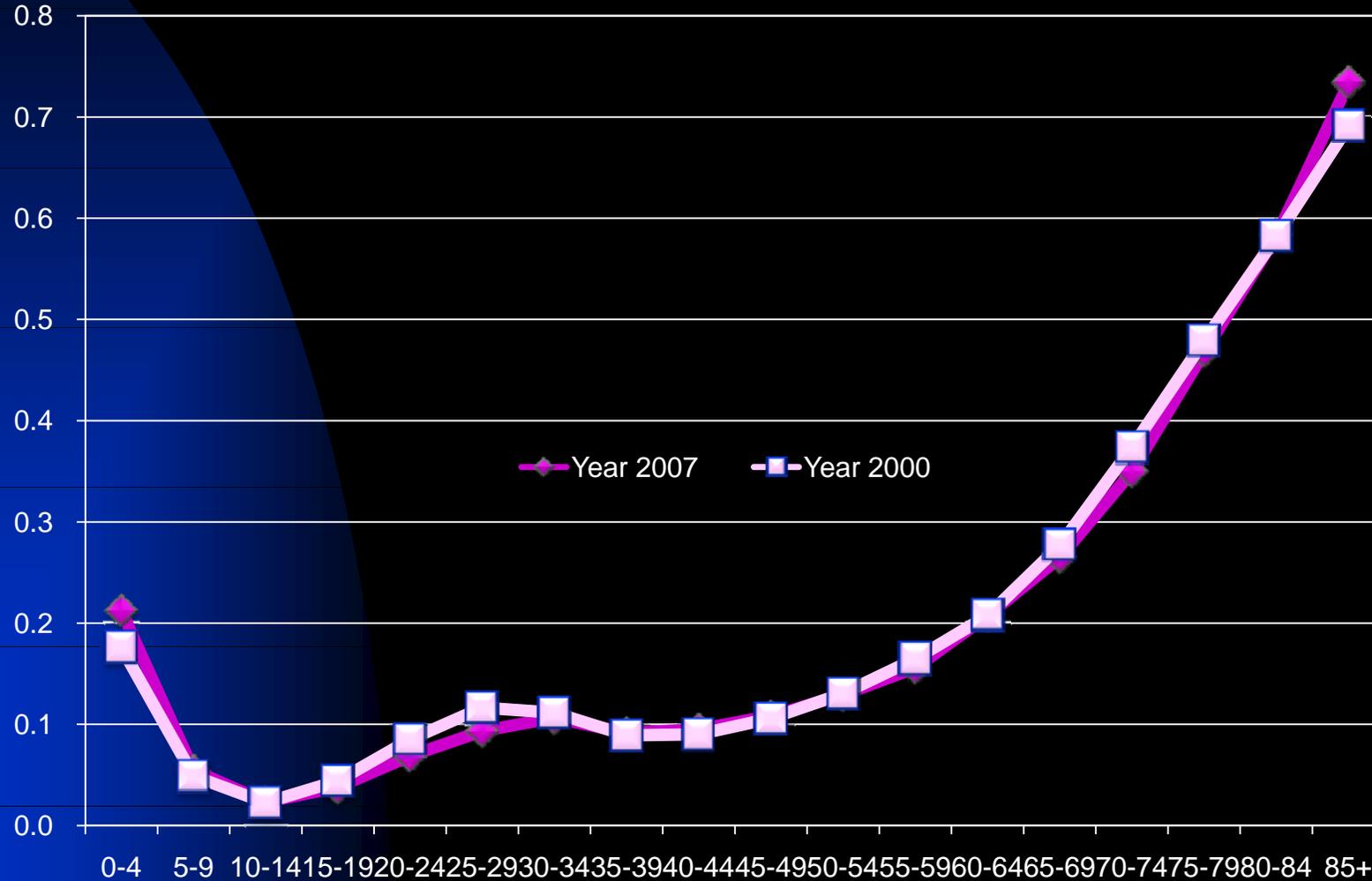
**Data Source: Taiwan Department of Health and OECD**

# Ambulatory Utilization Per Capita by Age Groups (2000 Vs. 2007)



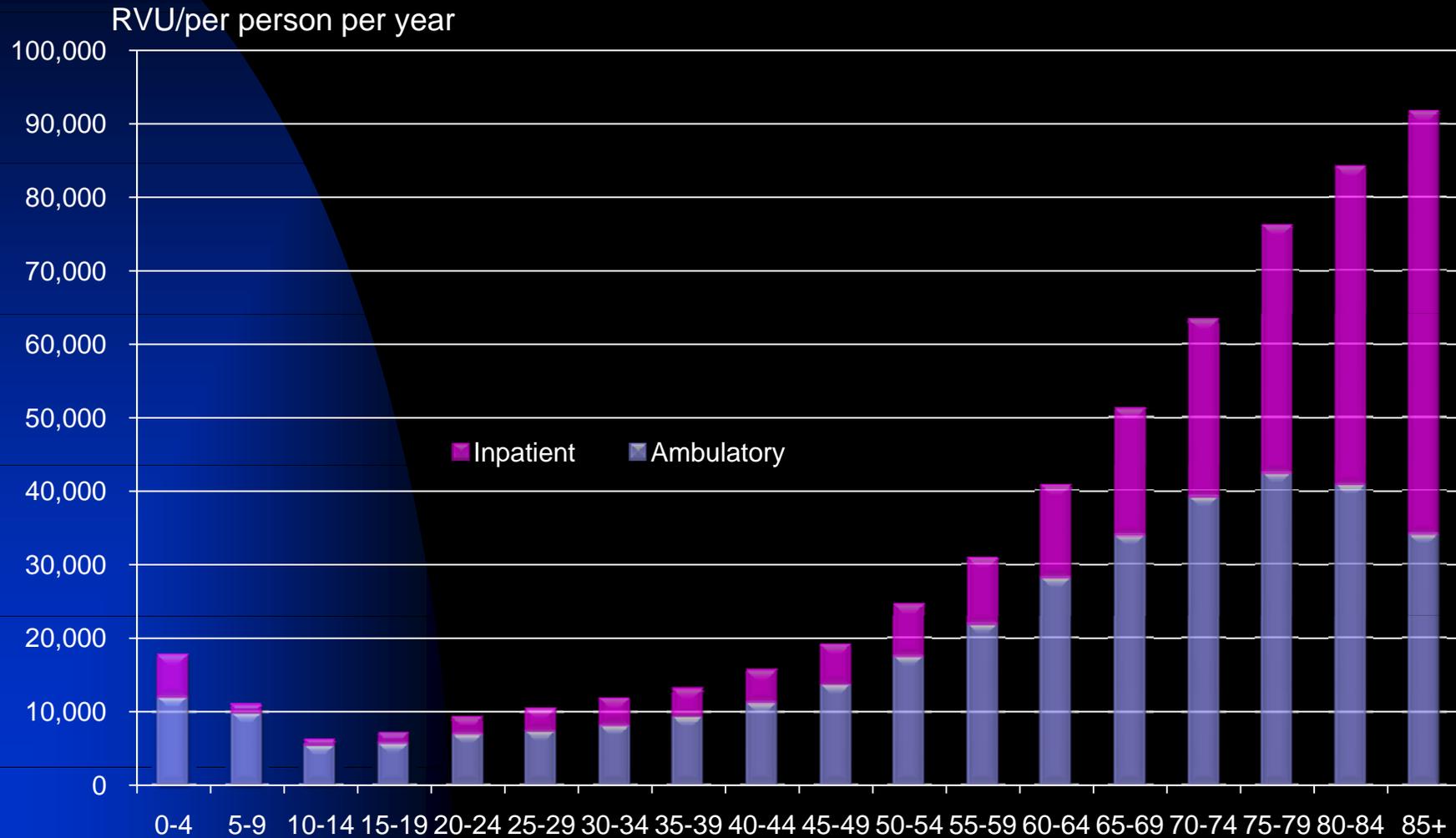
# Inpatient Utilization Per Capita by Age Groups (2000 Vs. 2007)

No. of hospital admission



Data Source: National Health Insurance Annual Statistical Report

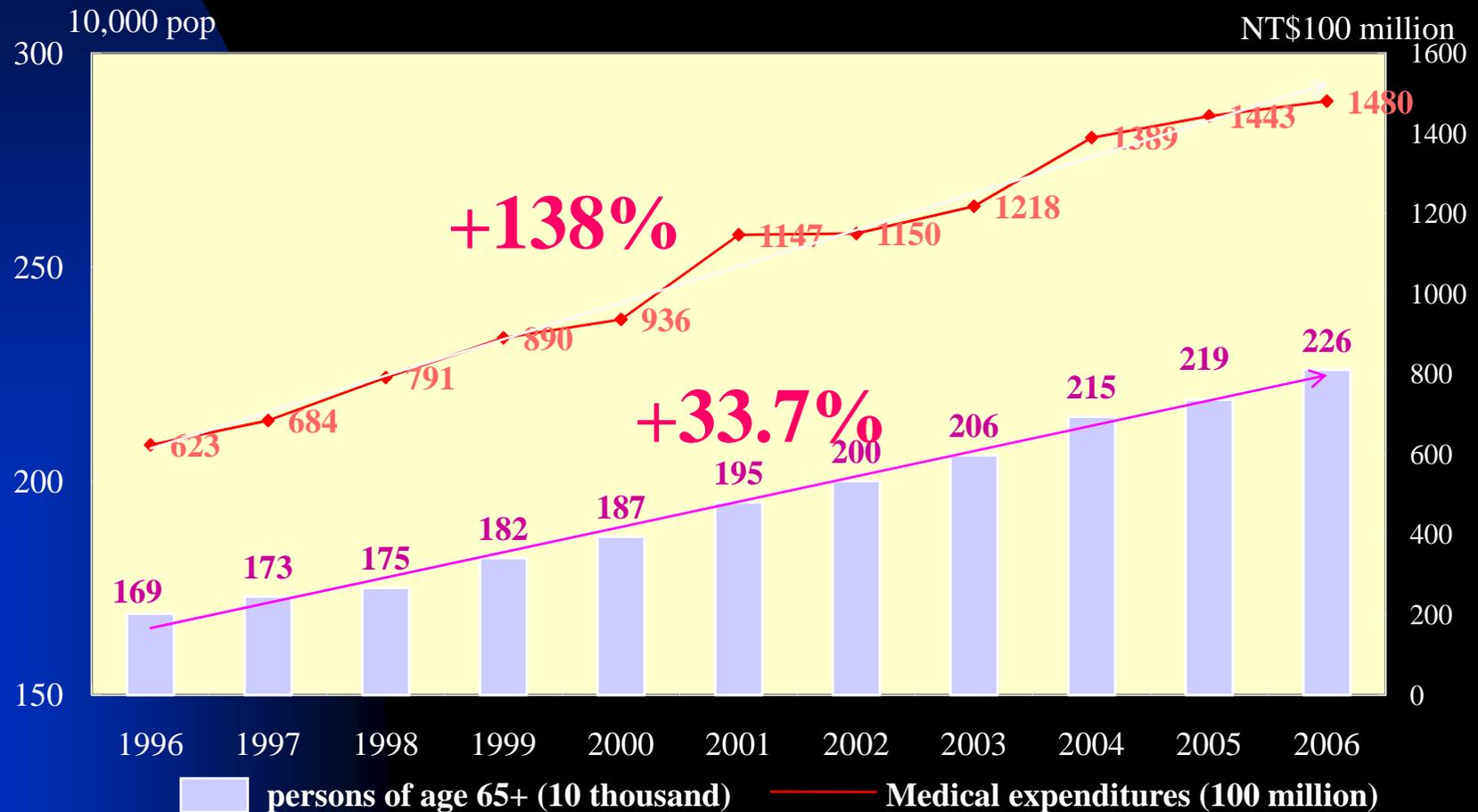
# Medical Expenditure Per Capita by Age Groups (2007)



*Data Source: National Health Insurance Annual Statistical Report*

# Medical Expenditure on Age 65+

% of age 65+	% of medical cost
10.0%	32.7%



# Ratio of Per Capita Medical Expenditure (age 65+ / age 0-64)

	2000	2003	2005	2007
Medical expenditure on Age 65+ (RVU/per person)	49,504	59,889	65,974	67,183
Medical expenditure on Age 0-64 (RVU/per person)	11,767	13,033	15,145	15,338
<b>Ratio (Age 65+/Age 0-64)</b>	<b>4.21</b>	<b>4.60</b>	<b>4.36</b>	<b>4.38</b>
<b>Korea</b>		<b>3.16</b>	<b>3.37</b>	

*Data Source: S Kwon, Introduction of Long-term Care (LTC) Insurance in Korea  
National Health Insurance Annual Statistical Report*

# NHI & LTC in Taiwan: It's about Time to Part, Dear!

- Part of the deficit of NHI was contributed by services that are supposed to fall into LTCI or social welfare, such as:
  - Social hospitalization;
  - Renal dialysis above certain age
  - Being on ventilator for an extended period, etc
- Insufficient coverage for LTC by NHI only exacerbates fragmentation of LTC.

# Yet, I shall take good care of you.

- Good care by NHI will alleviate pressure on LTC: P4P for certain chronic illness
  - Hypertension;
  - Asthma;
  - Diabetes;
  - Breast cancer.



## LTC in Taiwan: Current Profile

# Where the Problems Lie: the Administrative Structure

- Turfs wars between the Department of Health and Ministry of the Interior Affairs;
- Provided by various agencies as well as an uncoordinated private sector.

# Where the Problems Lie: the Resources

- Human resources insufficient in quantity as well as in variety;
- Facilities imbalanced, and tilt to institutionalized care.
- Quality is a concern for most private facilities

# Where the Problems Lie: the Financing

- Mostly borne by the family or the individual;
- Limited coverage by the NHI.



## Toward an LTC Insurance in Taiwan

*“There is no (social) security on this earth; there is only opportunity. – Douglas McArthur*

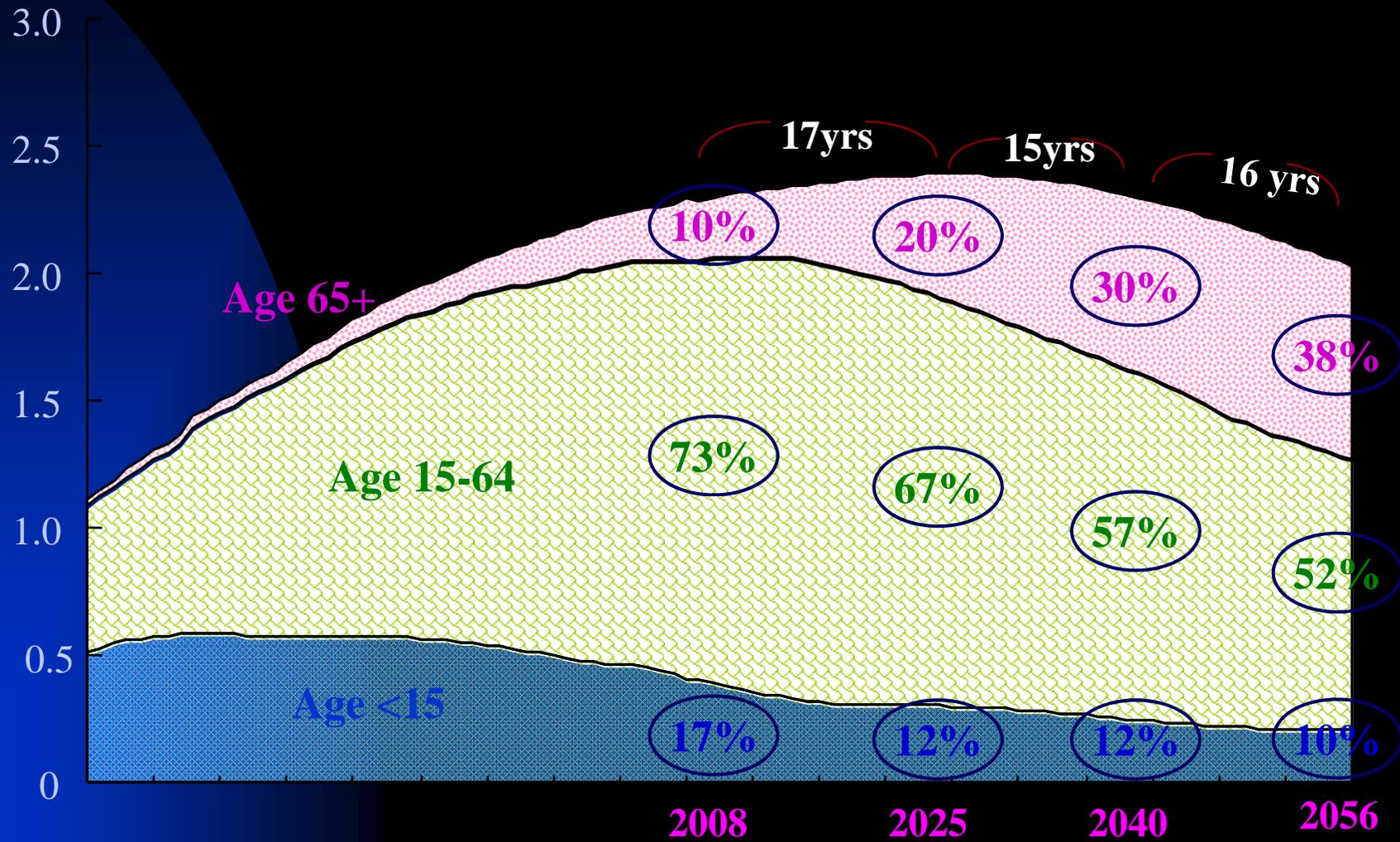


# Opening and Closing of the Double Windows

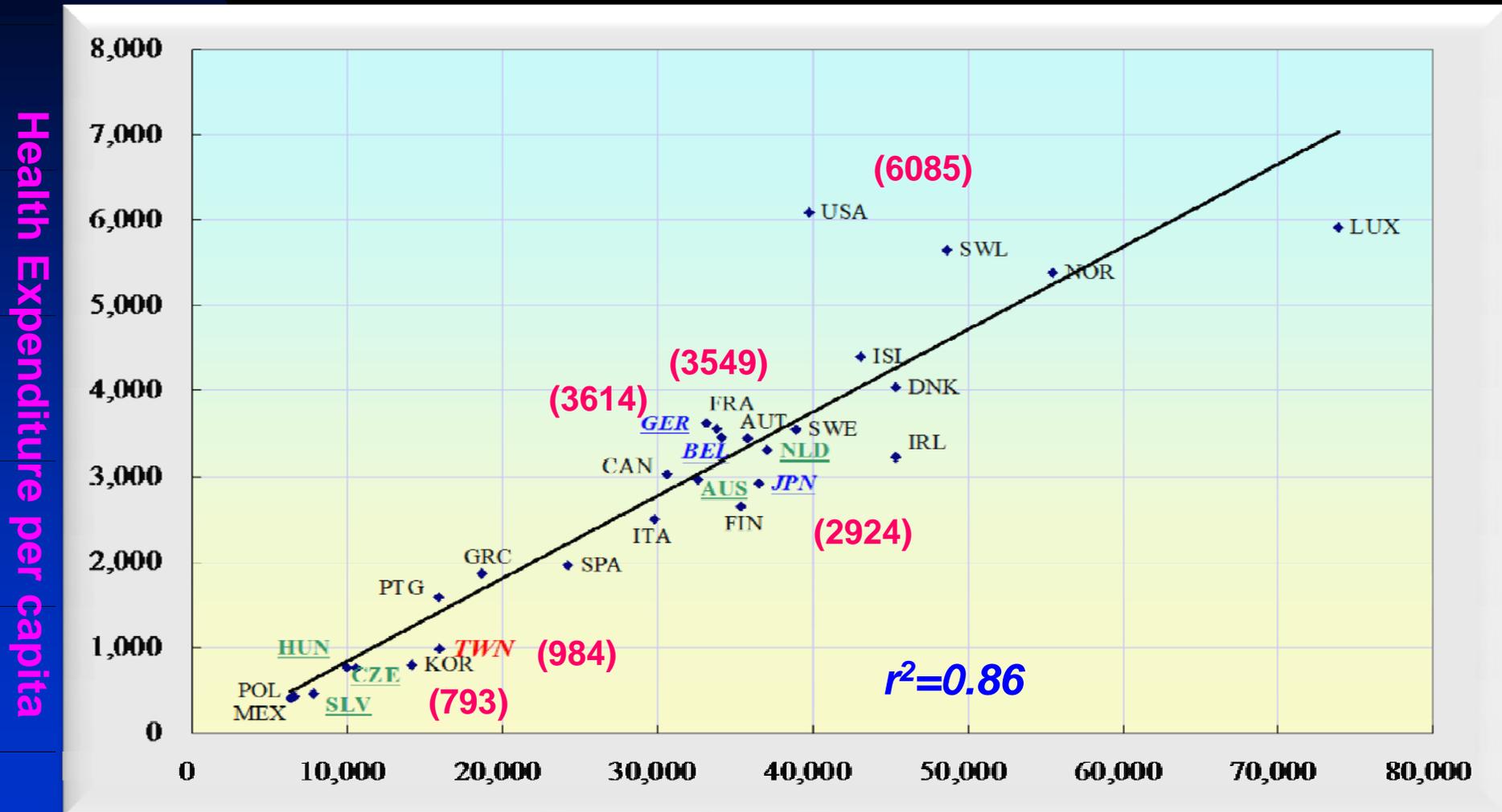
# The Double Windows

- The medical-burden window;
- The Demographic window.

# Future Population of Taiwan by Age



# Relationship between health expenditures per capita and GDP per capita (2004)



Source: OECD Health DATA 2006

GDP per capita, US dollars

# Head Start? – Percentage of 65+ When the LTCI Implemented

- Germany (1995): 16%;
- Japan (2000) : 17%;
- Taiwan (supposedly 2012): 11.2%.

# LTC in Taiwan: Recent Major Efforts(I)

- Demonstration Centers for LTC (1998) –Taking inventory on the resources;
- A Pilot Plan for the LTC System (2000) –yielding plenty experimental data;
- A Program for Developing the Care Industry (2002~2007) – Training human resources;

# LTC in Taiwan: Recent Major Efforts(II)

- Taskforce for LTC Programming (2004);
- Demonstration Project for Telehealth (2007~2008) – in search of the application of telehealth for LTC;
- Current Programming by the Council for Economic Planning & Development –aiming at a LTC insurance program in 2012.

# Feasibility for an LTC Insurance: the Financing(I)

- Willingness to pay: More than 70% are willing to pay for a LTCI;
- Ability to pay: Premium for NHI, National Pension, and LTCI together amounts to 3.81% of the household income.

# Feasibility for an LTC Insurance: the Financing(II)

- LTCI cost as % of GDP: 0.46%~0.56%, or approximately 1/7~1/9 that of the NHI;
- Government's contribution: 0.97% of the total governmental budget.

# Feasibility for an LTC Insurance: the Facilities

- Give priority to the under served areas;
- Give priority to the community-based facilities;
- Transform under-utilized community hospitals into LTC facilities.

# Feasibility for an LTC Insurance: the Human Resources

- Still less than 40% of the needed manpower;
- Urgent need for training programs – underway in many of the vocational colleges;
- Licensure system for quality assurance.

# Feasibility for an LTC Insurance: the Choice of the Administration

- A stand-alone agency, or
- A separate program administered by Bureau of NHI?

# Likely Timetable for an LTC Insurance

- Defining the Policy Parameters in 2009;
- Drafting the legislation in 2010;
- Passing the legislation 2011;
- Implementing in 2012.

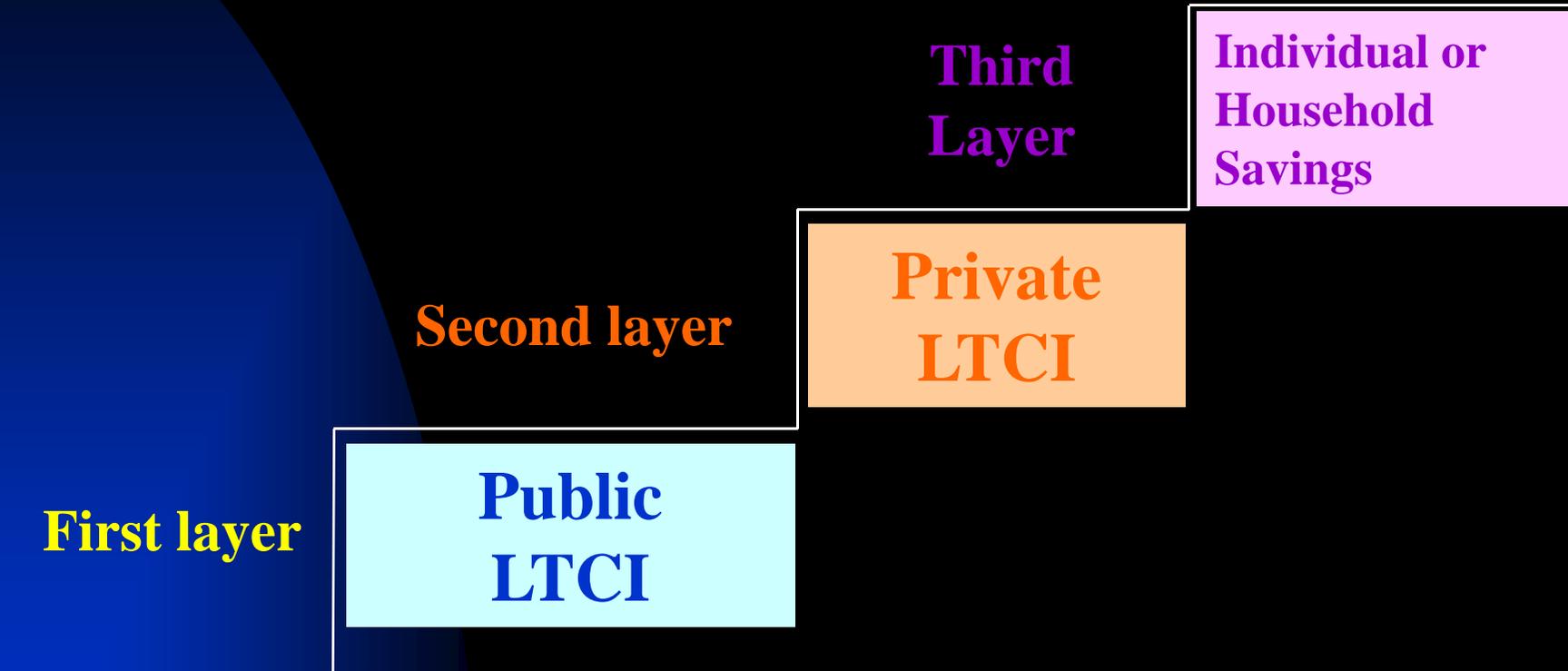


## Conclusion and Further Considerations on Policy Options

# Conclusion Remarks

- Quick aging calls for a systematic financing scheme for LTC;
- NHI has won worldwide reputation, while LTCI has to jump hurdles to come into being;
- Financing is a lesser problem for a LTCI, but infrastructure not quite ready;
- Quick legislation needed to get the resources mobilized.

# Multilayer of LTC as Conceived by the Current Taskforce



**The “Zero” Layer Social Assistance, NPOs, volunteers**

# Alternative Policy Issues

- Would LTCI crowd out voluntarism?
- How can we best tap the wealth vested in the fabrics of the society?
- Is market mechanism a solution for a “moderately prosperous but aging” society?
- Is social insurance viable in a post-solidarity world?

# In Search of a Viable Model on “Fluidarity”

## ■ Solidarity

- Boundaries well defined
- Stable employment structure
- Family well defined

## ■ Fluidarity

- A flat world
- Vicissitudes of the labor market
- Who is whose keeper?