

# Demographic Sweet Spot and Dividend in the Philippines: The Window of Opportunity is Closing Fast

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19 October 2015



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# Outline of the Presentation

- ❑ Demographic Window of Opportunity, Demographic Transition and the Demographic Dividend
- ❑ Challenges faced by the country before harvesting the dividend
- ❑ What can be done
- ❑ Key messages and policy issues

# The Goldilock Period: Demographic Window of Opportunity and Dividend

- ❑ The idea behind the population-and-development orthodoxy is the demographic transition.
- ❑ As countries move from large families (high fertility rate) into small families (low fertility rate), they pass through what is called a *Goldilock period* described as a generation or two in which fertility rate is neither too high nor too low (demographic window of opportunity).
- ❑ This fertility rate that is consistent with stable population is about 2.1 (the replacement rate of fertility).
- ❑ The fall to replacement fertility is a **unique and precious opportunity** for higher economic growth – demographic dividend.

# Demographic Factors and Economic Growth

- ❑ First dividend – demographic transition results in higher per capita income due to higher productivity as *large percentage of population joins the labor force; shifting of government expenditures from education and health services into investment that promotes growth*
- ❑ Second dividend - individuals *accumulate saving* in their working years to serve as buffer during their retirement years; when society increases its saving rate, this results in rapid economic growth, creating the second demographic dividend.
- ❑ Overall contribution of demographic dividend is about 35% of the average annual economic growth of the Asian economies (e.g. Japan, South Korea, Singapore, Taiwan, Thailand) during the period 1965-1995.

# Demographic Dividend is NOT Automatic

- ❑ Demographic dividend, while essential to economic growth, is not automatic!
- ❑ It should be given the right kind of policy environment to produce a sustained period of economic growth.
- ❑ The growing number of adults (particularly those aged 15 to 24) during the second phase of the transition will be productive (“effective workers”) only when there is flexibility in the labor market to allow expansion, otherwise the group will simply be “effective consumers”.
- ❑ Government plays a vital role to guarantee the creation of this demographic dividend.

# How to harvest the demographic dividend?

- ❑ Lower fertility rate is a necessary condition!
- ❑ Advocates of speeding the demographic transition placed emphasis on the need of public efforts to speed up the voluntary reduction in fertility rates as rapidly as possible.
- ❑ Sachs (2008) pointed out that “demographic transitions, where they have occurred, have typically been accelerated and even triggered, by proactive government policies.”
- ❑ There is a need to influence public policies that play an important role in assisting, particularly the poor households, the achievement of voluntary reduction of fertility rates.

## Policy Lessons from the East Asia Demographic Transition

- ❑ McNicoll (2006) identified some key policy lessons of the demographic transition that played a crucial role in the “East Asian Economic Miracle” (countries studied: China, Indonesia, Malaysia, South Korea, Taiwan, Thailand and Vietnam).
- ❑ Three relevant government policies that had major influences in accelerating the demographic transition: (a) health services, (b) family planning and (c) education (particularly the secondary education).

## Two Challenges in Harvesting the Demographic Dividend for the Country

1. High Fertility Rate in Households (particularly the poor households)
2. High Unemployment Rate among the Young Workers.



# Challenge Number 1: High Fertility Rate

# Total Fertility Rate (TFR) in the ASEAN and South Korea (1960-2013)

Country	Year						2013
	1960	1970	1980	1990	2000	2006	
South Korea	5.7	4.5	2.8	1.6	1.5	1.1	1.2
ASEAN 5							
Singapore	5.5	3.1	1.7	1.9	1.4	1.3	1.2
Thailand	6.4	5.3	3.2	2.1	1.9	1.9	1.4
Indonesia	5.5	5.4	4.4	3.1	2.4	2.2	2.3
Malaysia	6.8	5.5	4.2	3.7	3.0	2.7	2.0
Philippines	7.0	6.2	5.2	4.3	3.6	3.3	3.0
Rest of SE Asia							
Vietnam	6.1	5.9	5.0	3.6	2.9	2.1	1.7
Myanmar	6.1	6.0	4.5	3.4	2.4	2.1	1.9
Brunei Darussalam	6.8	5.6	4.0	3.2	2.6	2.3	2.0
Cambodia	6.3	5.8	5.8	5.7	4.0	3.3	2.9
Lao PDR	6.4	6.4	6.4	6.1	4.0	3.3	3.0

# Implications of Slow Demographic Transition: Vietnam and the Philippines

Comparing the Philippines and Vietnam, by the National Transfer Accounts (2012) concluded that the Philippines is experiencing a slower demographic transition due to its continued high fertility rate and it will be at 2050 when the country will have a favorable demographic condition compared to Vietnam, but without the important opportunities to save and invest (outcome of the first and second demographic dividend) that Vietnam will experience from 2010 to 2050.

<b>Total Fertility Rate (TFR) by Wealth Quintile</b>		
<b>Wealth Quintile</b>	<b>NDHS 2008 (Reference year: 2007)</b>	<b>NDHS 2013 (Reference year: 2012)</b>
<b>Bottom (Poorest)</b>	5.2	5.2
<b>Second</b>	4.2	3.7
<b>Third</b>	3.3	3.1
<b>Fourth</b>	2.7	2.4
<b>Highest (Richest)</b>	1.9	1.7
<b>Overall</b>	3.3	3.0

The TFR of the poorest households is the same as the country's average TFR in 1980.

Challenge Number 2: High Unemployment Rate among the young workers (15 to 24).

## Labor Income Ratio by AGE Group Relative to the 30-49 Year Old (2010)

Age Groups	Labor Force Participation Rate	Employment Rate	Unemployment Rate	Labor Income Ratio
Ages 15-19	31.30	91.38	8.62	0.41
Ages 20-24	64.80	73.74	26.26	0.74
Ages 25-29	74.20	90.14	9.86	1.00
Ages 30-49	77.30	91.86	8.14	1.00
Ages 50-54	79.10	94.16	5.84	1.07
Ages 55-64	67.90	97.92	2.08	1.17
Ages 65 & above	37.80	98.96	1.04	0.76
Total	64.10	90.10	9.90	

Unemployed Workers (2010 & 2013), in Thousand				
Age Group	2010		2013	
	Count	%	Count	%
Total	2,858.5	100	2,904.5	100
15-24	1,460.7	51.1	1,408.7	48.5
25-34	846.8	29.6	883.7	30.4
35-44	265.1	9.3	305.7	10.5
45-54	180.1	6.3	186.6	6.4
55-64	87.2	3.1	100.2	3.5
65 and Over	18.6	0.7	19.6	0.7

Source: Labor Force Survey (2010 and 2013), PSA

# Econometric Model using Panel Data (Provincial Panel)



**Determinants of Fertility Rate**  
**Econometric Models using Panel Data**  
(74 Provinces; 1993, 1998, 2003, 2008 and 2013)

Variables	Model 1		Model 2	
	Least Squares		Panel Fixed Effects	
Log of Per Capita Income	-0.29	**	-0.16	
Average Years of Education of Women	-0.27		-0.25	***
Labor Force Participation Rate of Women	0.001		-0.02	***
U5MR	0.008	***	0.003	*
Contraceptive Prevalence Rate	-1.41	***	-1.52	**
Constant	8.623	***	6.347	***
N	362		362	
R-Squared	0.361		0.215	
F-Stat	33.42		18.76	
F Sig	0.000		0.000	

Significance: \* 10% level one-sided test; \*\* 5% level; \*\*\* 1% level of significance

Note: Panel Fixed Effects Model is better compared to Least Squares based on unobserved effects F-test

# Identifying the Demographic Window of Opportunity

# Concept of Effective Workers, Effective Consumers and the Support Ratio

- ❑ Changes in the age structure of the population affect the growth of the economy because people earn and consume at different levels over their lifetime.
- ❑ Working adults in the aggregate produce more than they consume, while young children and the older groups consume more than they produce.

# Concept of Effective Workers, Effective Consumers and the Support Ratio

- ❑ One “Effective Worker” is a person earning the average income of a person in the prime working age group, at 30-49 (Lee and Mason, NTA, 2012).
- ❑ The effective number of consumers in a country is computed in a similar manner by weighting the population by the average consumption at each age group, using the average of the 30-49 years old as the benchmark (one “effective consumer”).
- ❑ The support ratio is then computed from the number of effective workers over the number of effective consumers.
- ❑ A support ratio of 0.5 means that each worker, on the average, is supporting himself/herself together with one other consumer.

# Concept of Effective Dependency Ratio

**Dependency Ratio (DR)** is defined as,

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**Effective Dependency Ratio (ERD)** is the Dependency Ratio adjusted for consumption and earnings.

**Inverse of the Effective Dependency Ratio (IERD)** is just  $1/EDR$

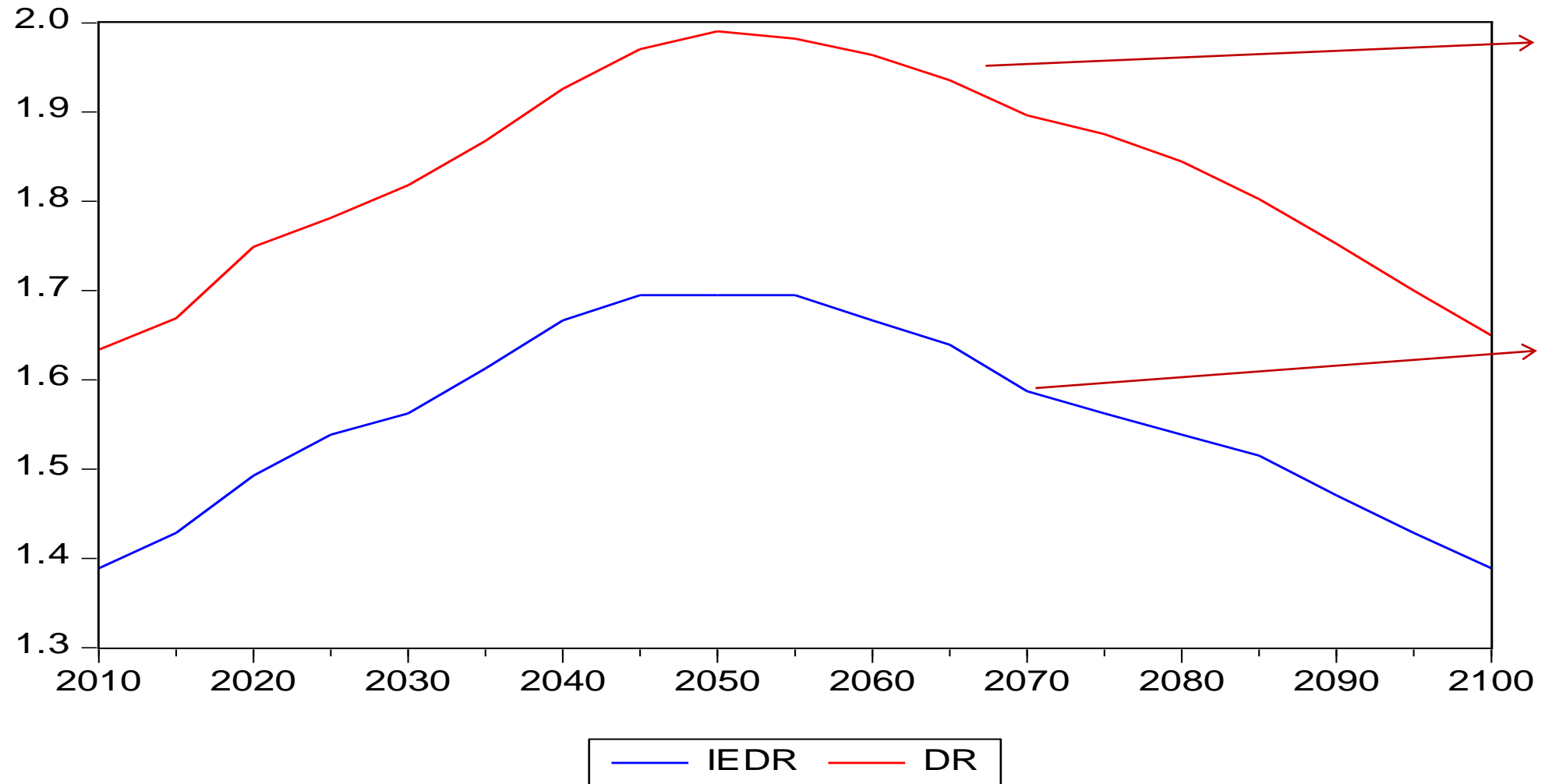
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## Consumption Ratio Across Age Groups (Relative to the 30 to 49)

Age Group	Average Per Capita Expenditure	Consumption Ratio
0 to 14	Php 22,157.00	0.64
15 to 24	Php 36,057.00	1.04
25 to 29	Php 36,010.00	1.04
30 to 49	Php 34,776.00	1.00
50 to 64	Php 35,946.00	1.03
65+	Php 37,170.00	1.07

# Inverse of Dependency Ratio (with and without adjustment on consumption and earnings)

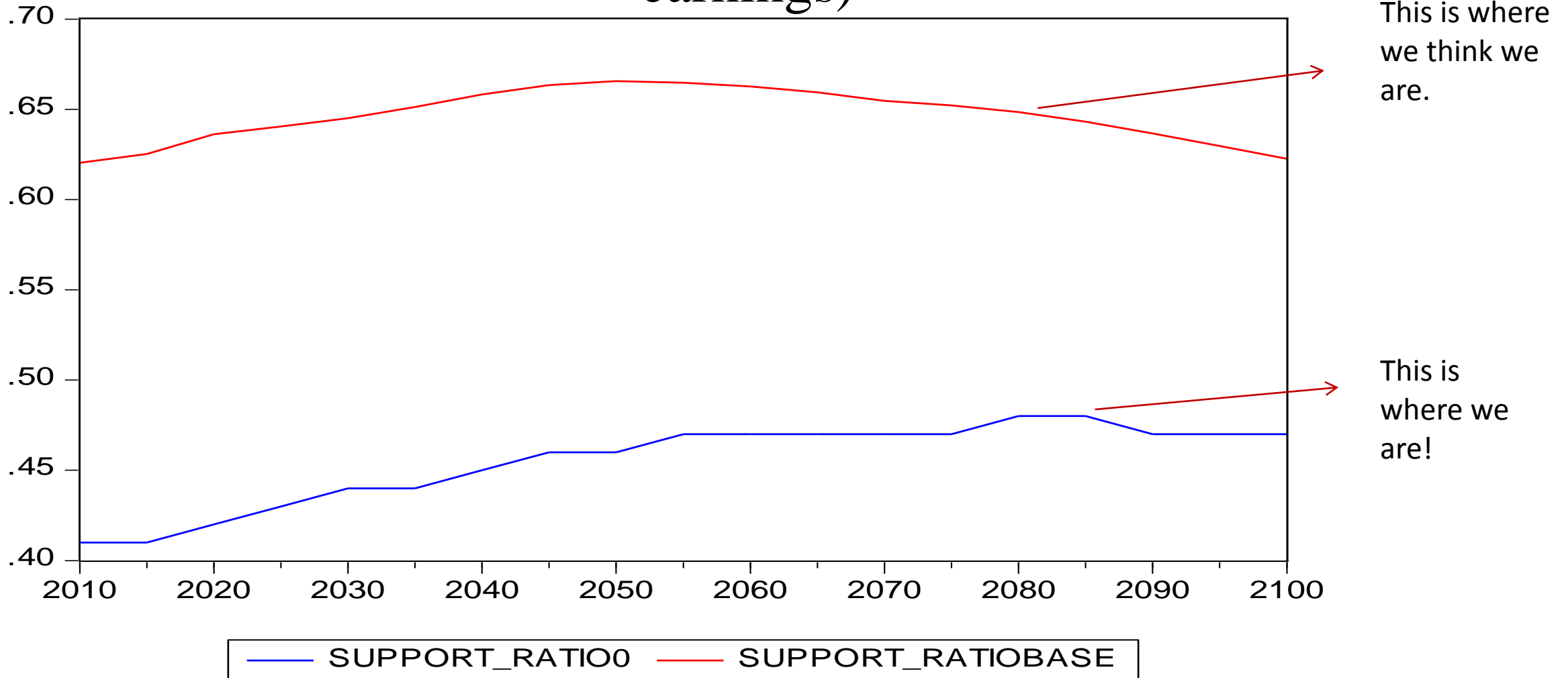


This is where we think we are.

This is where we are!



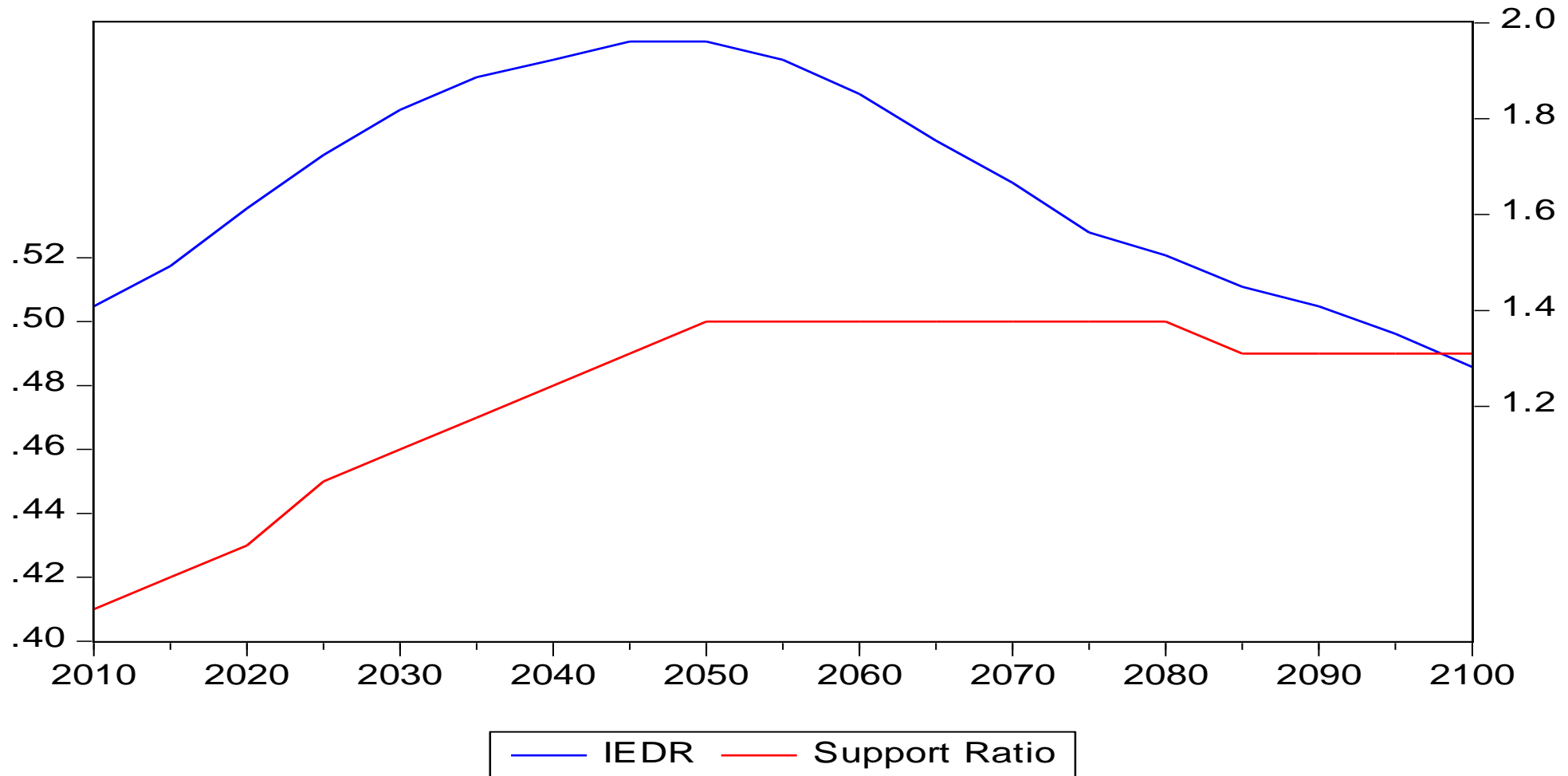
# Support Ratio (with and without adjustment on consumption and earnings)



# Lowering Fertility Rate is the KEY!

What if CPR will increase to 70 percent (from 50 percent) together with an additional two (2) years of schooling?

## Support and Dependency Ratios after Reducing Fertility Rate by Increasing CPR and the Years of Schooling by 2 Years

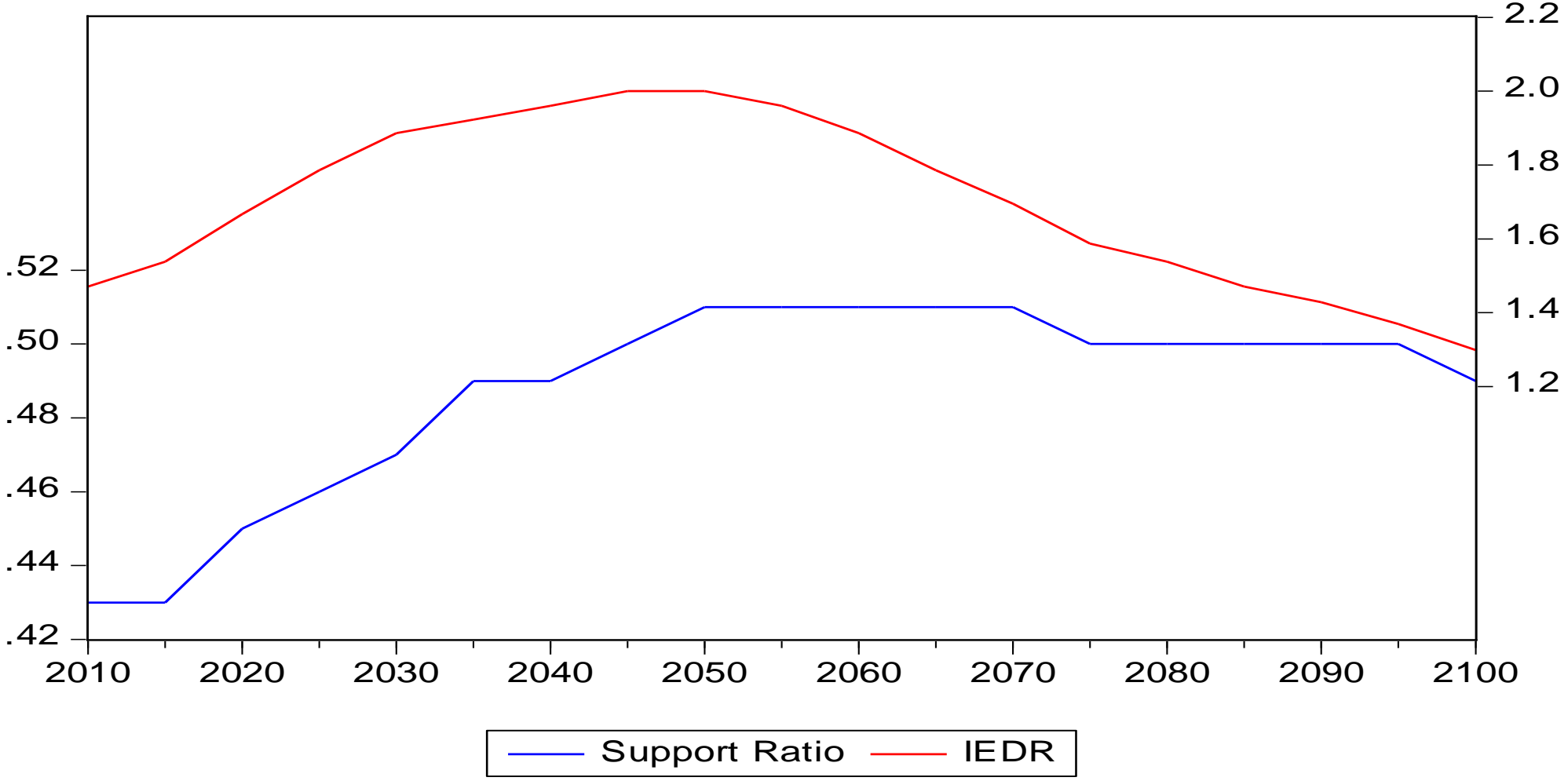


Support ratio will be highest at 0.50 from 2050 to 2080 (about 30 years).

## Demographic dividend is not automatic!

- ❑ The growing number of adults (particularly those aged 15 to 24) entering the labor market will be productive only when they are employed.
- ❑ What if the employment rate of the 20 to 24 years in the labor force is increased to 90%, from the current 74%?

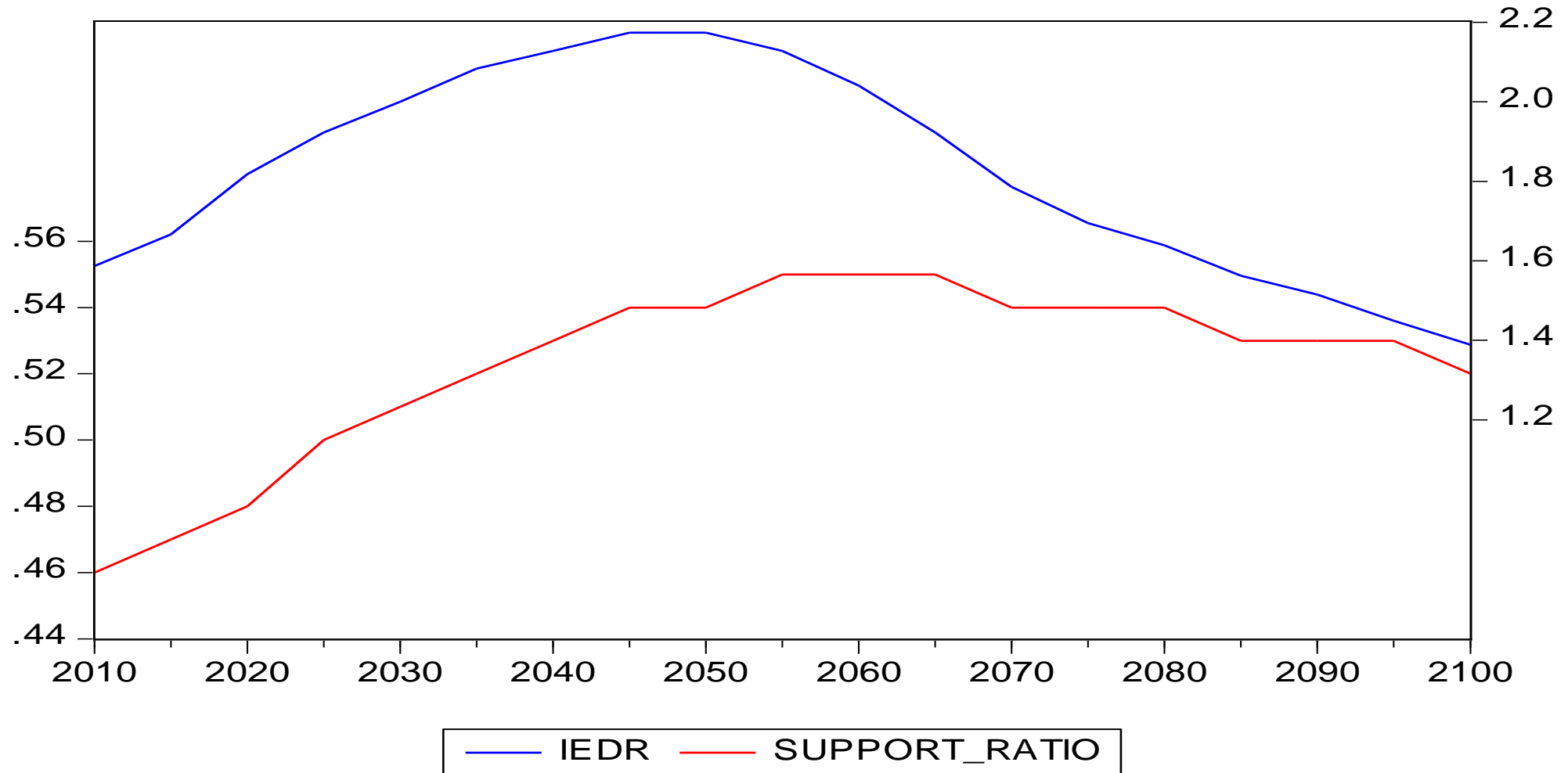
# Support and Dependency Ratios under Low Population Growth and Increasing Employment Opportunities for the Young Workers in the Labor Force



The support ratio will be greater than 0.50, from 2045 to 2095 or about 50 years;



# Support and Dependency Ratios under Low Population Growth, Higher Wage Ratio for Young Workers and Higher Employment Rate



Support ratio will be greater than 0.50 starting 2025, will be highest at 0.55 from 2055 to 2065.

# Another Challenge: Population Momentum

Year	Percentage of Women in the 15-49 Age Group
2010	52.16
2015	52.33
2020	51.83
2025	51.64
2030	51.53
2035	51.47
2040	51.15
2045	50.31
2050	49.58

## Key Messages and Policy Issues

- ❑ The country faces a demographic window of opportunity, a rare opportunity for the country to benefit from its relatively young population. This demographic window of opportunity creates the demographic dividend that can further enhance the country's economic growth.
  
- ❑ There are two major challenges to creating this demographic window of opportunity:
  - slow reduction in fertility rate, particularly among the poorest households, creates hindrance in exploiting this demographic gift.
  
  - high unemployment and underemployment rates among the young workers, particularly the 20 to 24 years old group.



## Key Messages and Policy Issues

- ❑ Lowering the fertility rate is a necessary condition to the creation of the demographic window of opportunity. The country must strengthen public efforts in order to speed up the voluntary reduction in fertility rates as rapidly as possible. Full implementation of the Reproductive Health (RH) Law is the key to lowering fertility rate.
- ❑ Demographic dividend is not automatic. The growing number of adults (particularly those aged 20 to 24) entering the labor market will be productive only when they are employed. Employment rate in the 20 to 24 aged group in the labor force must be increased to a higher level from the current 74%.

## Key Messages and Policy Issues

- ❑ Important work lies ahead if we serious in taking advantage of the benefits brought about by the changing age structure.
- ❑ The window of opportunity from the demographic transition is closing fast.

Thank you and good afternoon.



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