

FACT SHEET

LIVING HAPPILY EVER AFTER: THE ECONOMIC IMPLICATIONS OF AGING SOCIETIES



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A report of the World Economic Forum Pension Readiness Initiative developed in partnership with Watson Wyatt Worldwide

Population Developments Around The Globe

Due to medical advances, life expectancy is increasing rapidly and will likely continue to do so for the foreseeable future. Meanwhile, fertility rates in most of the world are declining. Because these trends are much more exaggerated in the developed world than in the developing world, general population aging and the decreasing of labor-force growth trends are occurring at increasingly varied rates in different regions of the globe. This will have a profound impact on the distribution of the global workforce in the coming decades.

■ In the year 2000, Mexico and Germany had roughly equivalent workforce populations, about 51 million people each. By the year 2030, however, Mexico will have a working-age population (ages 20-64) that is twice the size of Germany's, 80.5 million versus 43.1 million respectively.

■ In the current 15 European Union (EU) nations, the number of people aged 20-59 years will decrease from 208.7 million in 2000 to 151.2 million in 2050. Meanwhile, during the same period, the amount of people over the age of 60 will climb from 82.1 million to 125.1 million.

■ Over the long-term, Japan would have to increase its immigration rate 11-fold to make-up for its low fertility rates.

■ In India, on the other hand, the number of working-age people will increase by 335 million by 2030 – almost as much as the total working-age population of the EU and the United States combined in 2000.

■ Southeast Asia will see its workforce grow by 58 percent within the next 30 years.

Over the past two years, the Forum's Pension Readiness Initiative has combined leaders from our financial services and employment industry member companies with other experts from labour unions, international organizations, senior citizen groups and governments for the purpose of compiling a comparative assessment of the retirement system readiness of OECD countries and using it as a basis for high-level, public-private discussions about the need for greater action.

The initiative's first report is being released at the Forum's Annual Meeting 2004. It has been developed in partnership with Watson Wyatt Worldwide and provides perhaps the most comprehensive analysis to date of the macroeconomic implications over the next few decades of current demographic trends in a wide range of countries. It also presents extensive cross-country data highlighting similarities and differences in the circumstances facing these countries as well as their approaches to policy reform. The report was conceived in the belief that a tangible cross-country comparison of policy performance and conditions set in the context of a broader discussion about the stakes for the world economy could help to spur greater understanding and consensus for action.

Working-age Populations (20-64) of Selected Countries in Thousands

	2000	2010	2020	2030
Canada	18,943	20,911	21,517	20,985
Mexico	51,316	63,492	74,047	80,586
Japan	79,074	75,904	68,993	65,070
France	34,768	36,499	35,413	34,171
Germany	51,228	50,046	48,685	43,189
Italy	35,865	34,650	32,451	28,672
U.K.	35,093	36,411	36,314	33,889
United States	167,105	186,967	197,288	198,257

Economic Implications of Aging Societies and Workforces

As the retiree/active worker ratio continues to grow in developed economies, a country's demand for goods and services may increase at a rate that is higher than its workforce can deliver.

$$\text{GDP Growth Rate} = \text{Labor Growth Rate} + \text{Productivity Growth Rate}$$

If increased consumer demand is to be satisfied, either labor or productivity must increase to balance the equation. The aging of populations also has serious implications for the future of social insurance programs.

Productivity Facts:

- Certain EU countries are predicted to face labor shortages approaching 10 percent as soon as the end of the current decade. In the long-term, the result would be a dramatic reduction in the EU's output relative to other economies — from 18 percent of world output today to 10 percent in 2050.
- If productivity growth rates do not increase above those achieved over the most recent decade to adequately compensate for the slowdown in labor-force growth, many developed societies will have to accept a significant slowdown in their standards of living growth over the coming decades.

- Japan's compound annual growth in labor productivity slipped to 1.46 for the late 1990's, down from 8.63 in the 1960's.

Demographic Facts:

- In Belgium, the average female retiree now has an average remaining life expectancy of 29.8 years. By 2030, this number is projected to increase even further to 32.5 years.
- The estimated retiree/active worker ratio is expected to increase by 71.4 percent in the United States by 2030. Switzerland is expected to experience a 100.2 percent increase for the same period.
- Italy's retirees will outnumber its active workers by 2030.

Increases in Old Age Labor Force Participation Rates Necessary to Offset Projected Labor Shortfalls over the Coming Decade

	LFPR 55+ in 2000		Needed LFPR 55+ in 2010	
	Males	Females	Males	Females
France	18.2	11.5	27.7	24.2
Germany	29.6	14.0	42.7	21.4
Italy	21.8	6.8	37.1	15.6
Japan	57.5	28.4	62.4	30.0
Netherlands	25.9	10.0	36.3	20.0
Spain	26.0	8.5	41.7	20.9
Sweden	36.3	25.7	41.6	28.8
Switzerland	45.1	29.2	54.1	36.7
United States	40.0	25.7	51.9	39.8

Increases in Younger Workers' Labor Force Participation Rates Necessary to Offset Projected Labor Shortfalls over the Coming Decade

	LFPR 20-29 in 2000		Needed LFPR 20-29 in 2010	
	Males	Females	Males	Females
France	74.5	64.1	96.7	82.3
Germany	84.4	72.5	111.6	95.5
Italy	73.2	56.6	118.5	91.1
Japan	85.1	71.2	97.4	81.6
Netherlands	88.9	81.5	108.9	99.6
Spain	78.4	67.6	120.4	105.1
Sweden	78.2	70.8	89.9	80.2
Switzerland	84.3	72.7	99.6	85.3
United States	87.5	75.2	105.4	90.6

What Has To Happen?

Increase the Working Population

■ There are many initiatives countries can take to increase the size of their working populations:

- extend the working period for older workers
- increase immigration
- bring previously untapped resources (i.e., younger workers, women) into the workforce

■ The most effective solution will differ substantially from one economy to another based on a country's current and projected economic and demographic conditions.

Increase Productivity

■ Productivity growth is determined by the quality of workers, capital stock and technology.

■ Capital deepening has been a solution for some economies, but it cannot fully compensate for labor shortfalls and also decreases rates of return on capital.

■ Investing in technology is another partial answer, but it is relatively unpredictable and therefore impossible to factor into any long-term economic strategy.

Address Impediments to North-South Capital Flows

■ By studying population developments on a global scale, aging countries can improve the return on invested assets by reducing impediments to investment in younger societies with a high potential for growth.

■ Every developed economy has a relatively young, high-labor growth country nearby.

More information is available at www.weforum.org and www.watsonwyatt.com



Increase in Immigration Required to Offset the Extent Fertility Falls below Population Replacement Levels

	Average total fertility rate 1995-2000 ^a	Average births 1995-2000 (000s)	Additional births at TFR=2.1 ^a (000s)	Average net immigration 1995-2000 (000s)	Multiple of current immigration to offset low fertility
Australia	1.8	1250	42	95	0.4
Canada	1.6	1782	111	144	0.8
Denmark	1.7	328	15	14	1.1
France	1.7	3649	172	39	4.4
Germany	1.3	3815	470	185	2.5
Italy	1.2	2623	393	118	3.3
Japan	1.4	6160	616	56	11.0
Netherlands	1.5	935	75	32	2.3
Spain	1.2	1823	273	37	7.4
Sweden	1.5	441	35	9	3.9
Switzerland	1.4	367	38	4	9.6
United Kingdom	1.7	3530	166	95	1.7
United States	2.0	19983	200	1250	0.2

Working-Age Population in Millions

	2000	2010	2020	2030	Change 2000-2030
The Americas					
Canada	19	21	22	21	2
United States	167	187	197	198	31
Mexico	51	63	74	80	29
Central America less Mexico	16	22	29	35	18
South America	187	228	260	282	95
Europe					
European Union	229	231	224	205	-24
Eastern Europe	186	192	178	158	-28
Northern Africa	86	113	138	158	72
Middle East	92	120	149	179	86
The -stans and Iran	133	178	226	276	143
Asia-Pacific					
Japan	79	76	69	65	-14
Australia/N.Z.	14	15	16	16	2
China	770	877	914	900	130
India	520	645	766	855	335
Southeast Asia	275	341	398	434	159