

## Week Thirty: The Elderly and the Economy

**Weekly Focus:** Response with Evidence

**Weekly Skill:** Response with Textual Evidence

**Lesson Summary:** This week students will have a chance to apply economic concepts to a current issue. They will also practice interpreting the wording of a prompt, and write an evidence-based response to the question.

**Materials Needed:** Age Invaders Reading, Passage 1 and Passage 2

**Objectives:** Students will be able to...

- Demonstrate comprehension of a reading by responding to questions orally and on paper
- Paraphrase the wording of the prompt
- Write at least one paragraph of an evidence-based response

**Notes:** This lesson contains a lot of reading. The first reading is focused on comprehension, and it sets the stage for the writing passages and prompt. To keep everyone alert, feel free to have students stand and stretch periodically.

Brain Break (optional): Have everyone stand and create a little room around them. Instruct them to take a piece of paper (any paper) and lay it flat on their open palm. Next, challenge them to pass that piece of paper (keeping the paper resting on an open, flat palm) around their body without dropping it. This is a good break between reading exercises!

Also, the Social Studies extended response item will ALWAYS ask students to compare a short passage with a longer passage, and explain how they relate to one another. The passages will likely be focused on U.S. founding documents and principles.

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### Activities:

#### Warm-Up/Review: Preparation

**Time: 10 minutes**

Remind students that in the previous weeks we have been talking about several economic concepts: scarcity and trade-offs, supply and demand, GDP and GDP per capita. Ask students to write down what they remember about GDP and GDP per capita from last week (or write what they know about it if they were absent), as this concept will show up in the readings for today.

#### Reading Comprehension

**Time: 45 minutes**

- 1) Hand out the "Age Invaders" reading.
- 2) Read through as a class, stopping to write and discuss answers to the questions in the margins as they appear. Instruct students to attempt to answer the question SILENTLY before talking about it. This will give everyone a chance to formulate their thoughts and look back to the text for the answer. Once everyone has had a chance to think about it, answer it as a class, instructing students to write the answers in the margins.

**Break: 10 minutes**

#### Written Response

**Time: 50 minutes**

- 1) Hand out the Worksheet with Passage 1 and Passage 2. Ask a student to volunteer to read Passage 1 aloud. Discuss the necessary vocabulary. Then, read Passage 2 as a class. Stop after each paragraph to check comprehension. Be sure to check comprehension of the graph as well.
- 2) Have a student volunteer to read the prompt. Then, ask the class if they can paraphrase what the prompt is asking in their own words.
- 3) Have students write a response to the prompt, referencing both texts.  
 Note: Some more advanced students will be able to complete the writing, while others may only get notes gathered. Whatever the case, instruct students to write down SOMETHING on the paper, even if it is more of an outline!

## EXCERPTS FROM **AGE INVADERS**

A GENERATION OF OLD PEOPLE IS ABOUT TO CHANGE THE GLOBAL ECONOMY. THEY WILL NOT ALL DO SO IN THE SAME WAY

Apr 26th 2014 | [From the print edition](#) | [Full article at:](#)

<http://www.economist.com/news/briefing/21601248-generation-old-people-about-change-global-economy-they-will-not-all-do-so>



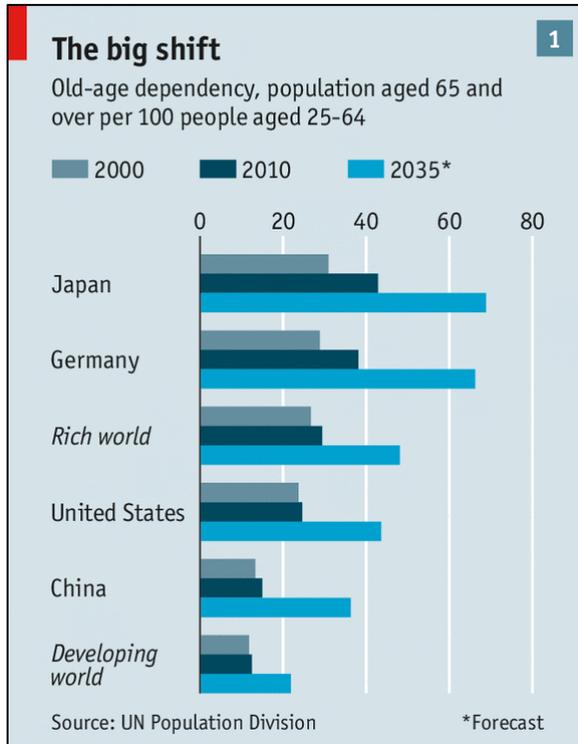
IN THE 20th century the planet's population doubled twice. It will not double even once in the current century, because birth rates in much of the world have declined steeply. [However,] the number of people over 65 is set to double within just 25 years. This shift in the structure of the population is not as momentous as the expansion that came before. [Yet,] it is more than enough to reshape the world economy.

According to the UN's population projections, the standard source for demographic estimates, there are around 600m people aged 65 or older alive today. That is in itself remarkable; the author Fred Pearce claims it is possible that half of all the humans who have ever been over 65 are alive today. But as a share of the total population, at 8%, it is not that different to what it was a few decades ago.

What is the “old-age dependency ratio?”

What is expected to happen to that ratio by 2035?

By 2035, however, more than 1.1 billion people—13% of the population—will be above the age of 65. This is a natural corollary of the dropping birth rates that are slowing overall population growth; they mean there are proportionally fewer young people around. The “old-age dependency ratio”—the ratio of old people to those of working age—will grow even faster. In 2010 the world



had 16 people aged 65 and over for every 100 adults between the ages of 25 and 64, almost the same ratio it had in 1980. By 2035 the UN expects that number to have risen to 26.

In rich countries it will be much higher (see chart 1). Japan will have 69 old people for every 100 of working age by 2035 (up from 43 in 2010), Germany 66 (from 38). Even America, which has a relatively high fertility rate, will see its old-age dependency rate rise by more than 70%, to 44. Developing countries, where today's ratio is much

lower, will not see absolute levels rise that high; but the proportional growth will be higher. Over the same time period the old-age dependency rate in China will more than double from 15 to 36. Latin America will see a shift from 14 to 27.

### Three ways forward

The big exceptions to this general greying are south Asia and Africa, where fertility is still high. Since these places are home to almost 3 billion people, rising to 5 billion by mid-century, their youth could be a powerful counter to the greying elsewhere. [However,] they will slow the change, not reverse it. The emerging world as a whole will see its collective old-age dependency rate almost double, to 26 per 100, by 2035.

Which country is expected to see the largest change in its old-age dependency rate between 2010 and 2035?

**What are some of the different opinions about the effects of a larger elderly population on the economy?**

The received wisdom is that a larger proportion of old people means slower growth and, because the old need to draw down their wealth to live, less saving; that leads to higher interest rates and falling asset prices. Some economists are more sanguine, arguing that people will adapt and work longer, rendering moot measures of dependency which assume no one works after the age of 65. A third group harks back to the work of Alvin Hansen, known as the “American Keynes”, who argued in 1938 that a shrinking population in America would bring with it diminished incentives for companies to invest—a smaller workforce needs less investment—and hence persistent stagnation.

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Who is right? The answer depends on examining the three main channels through which demography influences the economy: changes in the size of the workforce; changes in the rate of productivity growth; and changes in the pattern of savings.

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**What are some of the perceived effects of a larger elderly population on the economy?**

The first obvious implication of a population that is getting a lot older without growing much is that, unless the retirement age changes, there will be fewer workers. That means less output, unless productivity rises to compensate. Under the UN’s standard assumption that a working life ends at 65, and with no increases in productivity, [aging] populations could cut growth rates in parts of the rich world by between one-third and one-half over the coming years.

### **Have skills, will work**

Amlan Roy, an economist at Credit Suisse, has calculated that the shrinking working-age population dragged down Japan’s GDP growth by an average of just over 0.6 percentage points a year between 2000 and 2013, and that over the next four years that will increase to 1 percentage point a year. Germany’s shrinking workforce could reduce GDP growth by almost half a point. In America, under the same assumptions, the retirement of the baby-boomers would be expected to reduce the economy’s potential growth rate by 0.7 percentage points.

**What are some of the perceived effects of a larger elderly population on the economy?**

The real size of the workforce, though, depends on more than the age structure of the population; it depends on who else works (women who currently do not, perhaps, or immigrants) and how long people work. In the late 20th century that last factor changed little. An analysis of 43 mostly rich countries by David Bloom, David Canning and Günther Fink, all of Harvard University, found that between 1965 and 2005 the average legal retirement age rose by less than six months. During that time male life expectancy rose by nine years.

Since the turn of the century that trend has reversed. Almost 20% of Americans aged over 65 are now in the labour force, compared with 13% in 2000. Nearly half of all Germans in their early 60s are employed today, compared with a quarter a decade ago.

However, an even more important factor is education. Better-educated older people are far more likely to work for longer. Gary Burtless of the Brookings Institution has calculated that, in America, only 32% of male high-school graduates with no further formal education are in the workforce between the ages of 62 and 74. For men with a professional degree the figure is 65% (though the overall number of such men is obviously smaller). For women the ratios are one-quarter versus one-half, with the share of highly educated women working into their 60s soaring (see chart 2). In Europe, where workers of all sorts are soldiering on into their 60s more than they used to, the effect is not quite as marked, but still striking. Only a quarter of the least-educated Europeans aged 60-64 still work; half of those with a degree do.

It is not a hard pattern to explain. Less-skilled workers often have manual jobs that get harder as you get older. The relative pay of the less-skilled has fallen, making retirement on a public pension more attractive; for the unemployed, who are also likely to be less skilled, retirement is a terrific option. Research by Clemens Hetschko, Andreas Knabe and Ronnie Schöb shows that people who go straight from unemployment to retirement experience a startling increase in their sense of well-being.

Higher-skilled workers, on the other hand, tend to be paid more, which gives them an incentive to keep working. They are also on average healthier and longer-lived, so they can work and earn past 65 and still expect to enjoy the fruits of that extra labour later on.

This does not mean the workforce will grow. Overall work rates among the over-60s will still be lower than they were for the same cohort when it was younger. And even as more educated old folk are working, fewer less-skilled young people are. In Europe, jobless rates are highest among the least-educated

young. In America, where the labour participation rate (at 63%) is close to a three-decade low, employment has dropped most sharply for less-skilled men. With no surge in employment among women, and little appetite for mass immigration, in most of the rich world the workforce looks likely to shrink even if skilled [elderly individuals] stay employed...

**With the growing old-age dependency ratio, what implications are there on saving, both personally and nationally?**

### **Saving graces**

...If skill and education determine how long and how well older people work, they also have big implications for saving, the third channel through which ageing affects growth. A larger group of well-educated older people will earn a larger share of overall income. In America the share of male earnings going to those aged 60-74 has risen from 7.3% to 12.7% since 2000 as well-educated baby-boomers have moved into their 60s. Some of these earnings will finance retirement, when those concerned finally decide to take it; more savings by people in their 60s will be matched by more spending when they reach their 80s. But many of the educated elderly are likely to accumulate far more than they will draw down towards the end of life.

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At the same time governments across the rich world (and particularly in Europe) are trimming their pension promises and cutting their budget deficits, both of which add to national saving. Reforms designed to trim future pensions mean that, regardless of their skill level, those close to retirement are likely to save more and that governments will spend less per old person. The European Commission's latest forecasts suggest overall pension spending in the EU will fall by 0.1% of GDP between 2010 and 2020, before rising by 0.6% in the subsequent decade.

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A set of forces pushing investment down and pushing saving up, with no countervailing policy response, makes the impact of ageing over the next few years look like the world that Hansen described: one of slower growth (albeit not as slow as it would have been if older folk were not working more), a surfeit of saving and very low interest rates. It will be a world in which ageing reinforces the changes in income distribution that new technology has brought with it: the skilled old earn more, the less-skilled of all ages are squeezed. The less-educated and jobless young will be particularly poorly served, never building up the skills to enable them to become productive older workers.

## PASSAGE 1

We the People of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defence, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America.

--Preamble to the Constitution, 1788-1789

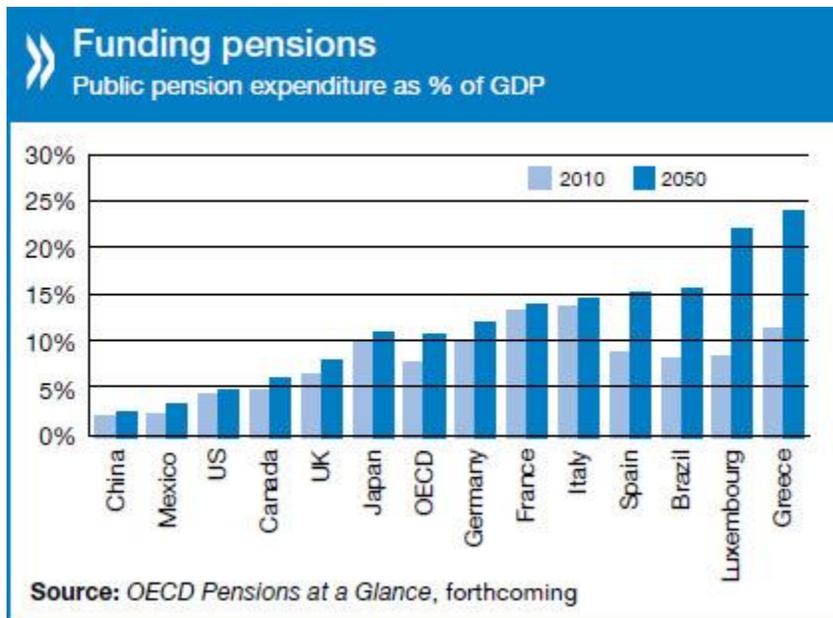
### Passage 2: TRIMMING PENSIONS

By Edward Whitehouse, Directorate for Employment, Labour and Social Affairs

Taken from: <http://www.oecd.org/general/trimmingpensions.htm>

(Note: OECD stands for: The Organization for Economic Co-operation and Development)

It is unsurprising that pensions have been part of many governments' attempts to balance their books. Old-age and survivors' pensions are often the largest single item in budgets: public pension spending averages about 8% of GDP in OECD countries, or 16% of total government expenditure.



Pension spending faces upward pressure from the well-known phenomenon of population [aging.] There are currently around four people of working age (20-64) for every one of pensionable age (65+) in OECD countries. This ratio will fall to three in about 2025 and two in 2050. While all OECD countries are ageing, some countries are facing a greater demographic challenge than others. Japan, the demographically oldest, will have just 1.2 people of working age for every one of pension age in 2050, while Turkey will have more

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than three. The International Monetary Fund has calculated that the fiscal cost of [aging] in the next 20 years will be nearly 10 times as large as the impact that the current crisis had on the public finances of the advanced G20 countries.

Many countries have already taken action to curtail future pension costs. The most visible change has been higher pensionable ages. From a low point of 62.5 years for men and 61.1 for women, the average pension age in OECD countries will increase to nearly 65 for both sexes in 2050. By that point, a number of OECD countries will have pension ages above 65 on current plans: 67 in Australia, Denmark, Germany, Iceland, Norway, the United States and 68 in the United Kingdom. Moving pension ages beyond 65 is also under serious consideration in Ireland and the Netherlands.

### PROMPT

The authors of the Constitution began by stating the values that the country is founded upon. Whitehouse writes about governments' trimming of pensions around the world. Does the trimming of pensions uphold the values of the Constitution? Why or why not?

Reference both texts in your answer, explaining how passage 1 and passage 2 relate to one another.