



CENTER FOR HOMELAND  
DEFENSE AND SECURITY  
NAVAL POSTGRADUATE SCHOOL



# HSx: GROWTH OF GLOBAL MIDDLE CLASS



April 2017

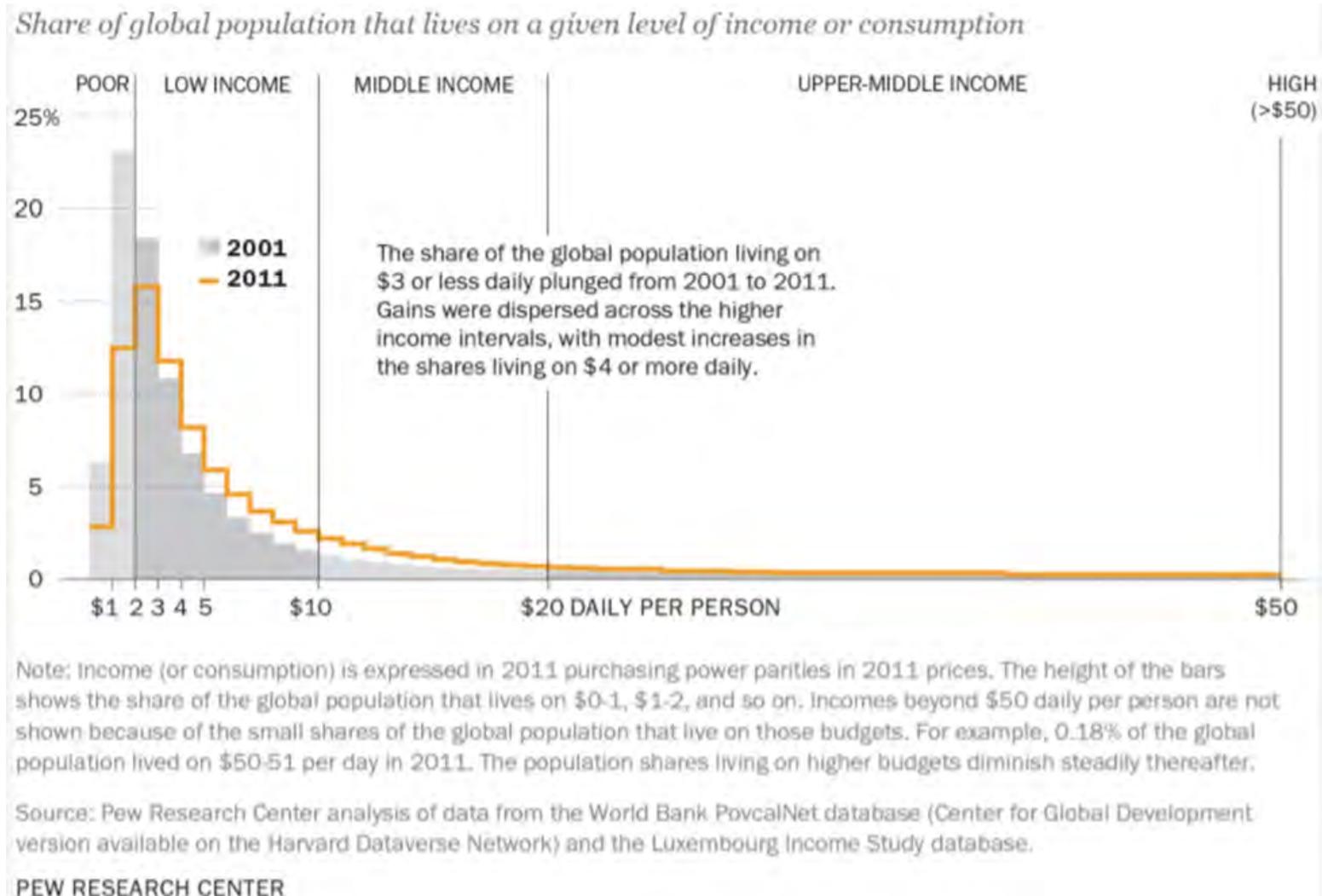
## CONTEXT: BROAD STROKES

- The global middle class is rapidly growing, representing the third major expansion of the global middle class since 1800 (the first expansion was during the Industrial Revolution, and the second expansion was during the period following World War II).
  - This current growth is focused almost exclusively in emerging and developing market countries.
  - From 2005 to 2015, middle class expenditures grew by 8 percent annually in developing countries compared to growth of 0.4 percent annually over the same period in developed countries.
  - In some of the fastest growing emerging and developing countries, the annual growth of middle class expenditures exceeded 10 percent in the 1990s and 12.5 percent between 2005 and 2015.
- Around one-quarter of the global middle class lives in advanced economies, two-fifths lives in BRIC countries (Brazil, Russia, India, and China), and the remainder live in emerging and developing countries.
- The global middle class was responsible for \$33-35 trillion in global spending in 2015, two-thirds of all consumer spending and one-third of the global economy.

## CONTEXT: BROAD STROKES (CONT.)

- By 2015, half of the 3 billion people in the global middle class lived in Asia; by 2030 two-thirds could live in Asia.
  - Populations in China in particular have undergone rapid entry into the global middle class.
  - Populations in India are expected to begin entering the global middle class in large numbers during the period of 2020 – 2030.
- The percentage of individuals in the world's poor has dramatically fallen during the first decade of the 21<sup>st</sup> century, however most of these individuals moving out of poverty are at high risk of sliding back into poverty rather than progressing into the global middle class.
  - This is particularly the case in several African and Latin American countries.
- The global middle class is expected to continue growing in emerging and developing countries.
- The majority (>50 percent) of the global population may be in the global middle class as early as 2020, with the global middle class hitting 4 billion people by 2021.

# CONTEXT: HOW IS INCOME CHANGING?



# CONTEXT: WHAT IT MEANS

- The increasing global middle class is expected to be one of the primary drivers of global economic growth over the next several decades as the consumption of individuals entering the global middle class rapidly increases.
  - This increased consumption will likely increase strains on natural resources and the environment.
- While the global middle class populations in Asia are rapidly expanding and in Africa, Latin America, and the Middle East are steadily growing, the global middle class populations in North American and European countries are growing at rates below global population growth (See slides 8 & 9 for definition of global middle class).

**Table 2. Number (millions) and share of the global middle class by region**

	2015		2020		2025		2030	
	#	%	#	%	#	%	#	%
North America	335	11	344	9	350	8	354	7
Europe	724	24	736	20	738	16	733	14
Central and South America	285	9	303	8	321	7	335	6
Asia Pacific	1,380	46	2,023	54	2,784	60	3,492	65
Sub-Saharan Africa	114	4	132	4	166	4	212	4
Middle East and North Africa	192	6	228	6	258	6	285	5
World	3,030	100	3,766	100	4,617	100	5,412	100

# BACKGROUND: WHAT IS THE MIDDLE CLASS?

- The middle class does not have a universal definition; based on the focus of the research or policy analysis, researchers, economists, social scientists, and other authors have used various quantitative and qualitative definitions of the middle class based on:
  - Income or expenditure statistics.
  - Education level.
  - Career influence (i.e., value of opinion in shaping decisions).
  - Asset ownership (e.g., home, car, television, mobile phone, computer, etc.).
- Generically, middle class is used to refer to those who are considered neither extremely poor nor extremely rich.
- Middle class implies some level of comfort, security, higher quality, and stability in terms of employment and access to food, health care, education, and social services.
  - Middle class may also imply some level of discretionary income which can be spent on non-necessity luxury and leisure goods and services.

# BACKGROUND: MIDDLE CLASS DEFINITIONS

- Some specific economic definitions of middle class used in previous work include (given in terms of income unless specified otherwise)\*
  - 0.5 – 1.5 times median household income within a country (OECD, 2010)
  - 0.75 – 1.25 times median salary within a country (Easterly, 2000)
  - 20<sup>th</sup> – 80<sup>th</sup> percentile of consumption within a country (Birdsall et al., 2000)
  - \$2 – \$10 expenditures per capita per day (Banerjee and Duflo, 2008)
  - \$2 – \$13 per capita per day (Ravallion, 2010)
  - \$2 – \$20 per capita per day (Ncube et al., 2011)
  - \$4 – \$13 per capita per day (International Labour Organization, 2013)
  - \$9 – \$77 per capita per day (Court and Narasimhan, 2010)
  - \$10 – \$20 per capita per day (Kochhar, 2014)
  - \$10 – \$50 per capita per day (Ferreira et al., 2012)
  - \$10 – \$100 per capita per day (several, see next slide)
  - \$12 – \$50 per capita per day (Milanovic and Yitzhaki, 2002)
  - \$16 – \$82 per capita per day (Wilson and Dragusanu, 2008)

\*Some of these estimates are based on household-level definitions of middle class that have been converted to per capita by assuming a four person household size. Further, some of these ranges are further broken into middle class subcategories.

# BACKGROUND: GLOBAL MIDDLE CLASS

- The global middle class, defined as a US\$10 - US\$100 per capita per day (expressed in purchasing power parity exchange rates [PPPs], based on 2005 PPPs) of income or expenditure, is becoming a standard economic definition used for expressing the relative purchasing power of individuals (US\$11 - US\$110 per capita per day in 2011 PPP based on inflation).
  - This level of income or expenditures represents the level of income where individuals have minimal risk of sliding back into global poverty (income of less than \$2 per day).
  - Additionally, individuals with this level of income generally do not need to worry about whether they can secure necessities, such as food or water, and have discretionary funds to spend on items other than necessities.
  - While the level of income necessary for having discretionary income is dependent on the cost of living, which varies greatly throughout the world, these bounds are computed using the PPPs, which are based on the relative costs of living rather than direct currency exchange rates.
- Due to the level of discretionary income associated with the global middle class, they are also referred to as the **global consuming class**.

# BACKGROUND: GLOBAL MIDDLE CLASS (CONT.)

- By the end of 2016, 3.2 billion people, or 43 percent of the global population, were in the global middle class.
- Nearly 88 percent of the next billion people entering the global middle class will live in Asia.
- By 2020, the majority (>50 percent) of the global population may be in the global middle class, and by 2030 this could be two-thirds.
- Currently, 140 million people enter the global middle class annually, and this could increase to 170 million annually by 2022.

Figure 5. Estimates of the size of the global middle class, 1950-2030 (billions)

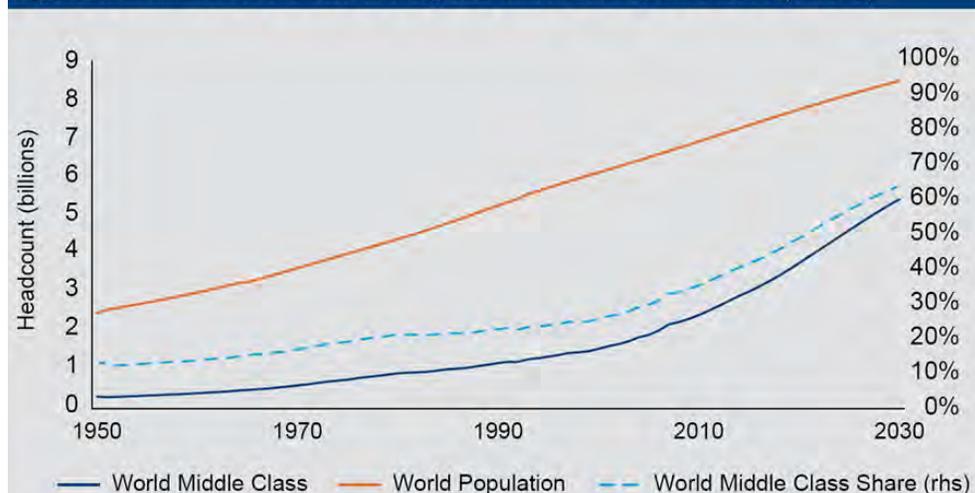
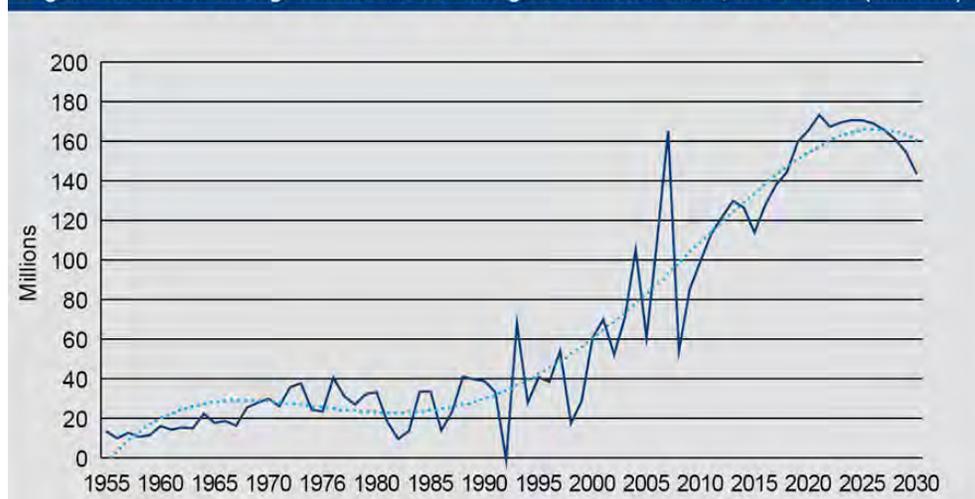


Figure 6. Annual changes in the size of the global middle class, 1955-2030 (millions)



Kharas, Homi. The Unprecedented Expansion of the Global Middle Class: An Update. Brookings Institution, 2017.

# BACKGROUND: ECONOMIC TIPPING POINT AND MIDDLE CLASS EFFECT

- As large sections of populations within emerging and developing countries enter the global middle class, they represent a huge potential for economic growth due to the increased discretionary income.
  - This is further amplified by the increased job security typically associated with middle class employment that allows for lower saving rates.
- Based on historical examples, it has been observed that once GDP per capita in a country surpasses a certain threshold, the domestic demand begins rapidly growing as consumption per capita increases within the country.
  - While the threshold necessary to initiate the acceleration of domestic demand and consumption varies by country, on average a GDP per capita of roughly \$6,000 has historically represented this economic tipping point.
  - After a country crosses this threshold, the increasing domestic demand will continue to drive economic growth and elevate people into the global middle class, who will then begin increasing demand and consumption, continuing to fuel economic growth.

# BACKGROUND: ECONOMIC TIPPING POINT AND MIDDLE CLASS EFFECT CONT.

- The combined economic power of the global middle class within countries with rapidly growing middle class can drive dramatic increases in domestic demand and consumption, creating a **middle class effect**, where economic growth is proportional to the size of the middle class.
- Based on projected economic growth, the year individual countries will cross the economic tipping point and begin experiencing the middle class effect were estimated by Wilson (2013), as shown to the right.

## Projected Year Select Countries Cross the Economic Tipping Point

Country	Year
Egypt	2011
Indonesia	2015
India	2017
Philippines	2019
Vietnam	2019
Pakistan	2024
Nigeria	2025
Bangladesh	2029

Source: Economist Intelligence Unit (EIU).

Image: Wilson, William T. "Hitting the Sweet Spot: The Growth of the Middle Class in Emerging Markets." London: Ernst and Young (2013).

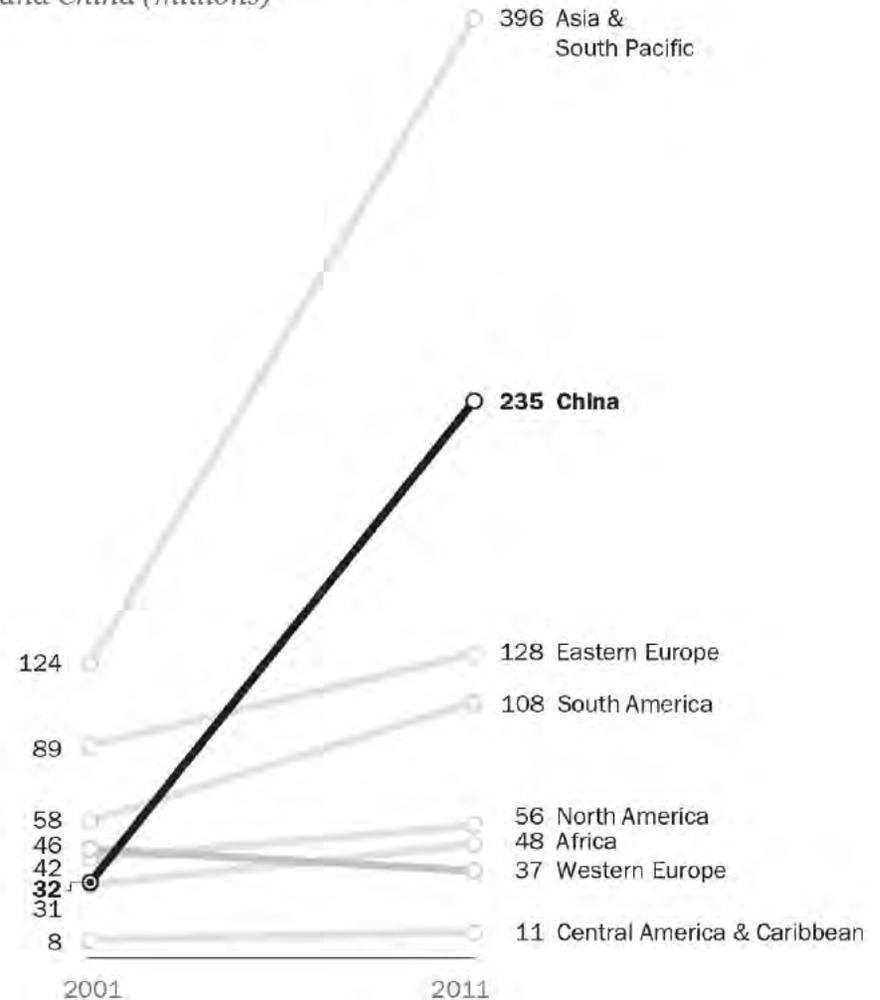
# BACKGROUND: THREE SECTOR ECONOMY

- The economy can be broadly categorized into three distinct sectors (the primary, secondary, and tertiary sectors), an idea originally proposed by Allan G.B. Fisher in his 1935 book *The Clash of Progress and Security*.
  - The **primary sector** involves harvesting raw materials and natural resources, such as food sources, water, coal, iron, etc.
  - The **secondary sector** involves the process of transforming raw materials into usable products and goods.
  - Finally, the **tertiary sector** involves supply the produced goods and products to individuals, primarily involving transportation and service jobs such as sales, food service, hospitality, etc., in addition to offering other services such as design, engineering, banking, tourism, etc.
- Other economists, academics, and researchers have proposed addition such sector categories, such as the quaternary and quinary sectors, however these are truly sub-categories of tertiary sector differentiate by high value added and specialization/expertise

# SURGING GLOBAL MIDDLE CLASS IN CHINA

- China has undergone a dramatic transformation in the economic status of its population, with rapidly shrinking number of individuals in global poverty and increasing number of individuals in the global middle class.
  - While 15 percent of China's population was in the global middle class in 2010, this could increase to nearly 70 percent by 2030
  - Using the World Bank's \$2 - \$13 per day middle class definition, China's middle class exploded from 175 million in 1990 to 800 million in 2005.
- The image to the right shows how prolific the growth of the middle class (\$10 - \$20 per capita per day) has been in China between 2001 and 2011.

*Number of middle-income people in major regions and China (millions)*

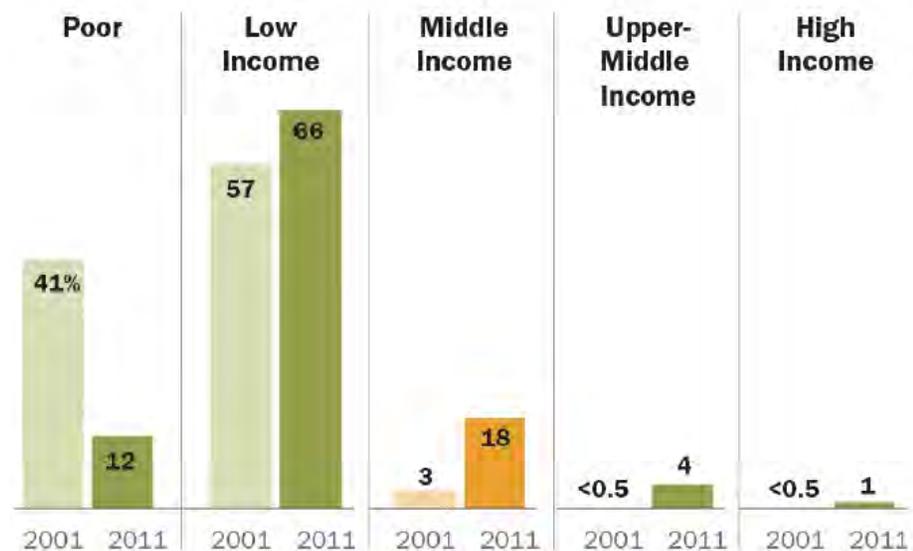


# SURGING GLOBAL MIDDLE CLASS IN CHINA (CONT.)

- China is responsible for more people entering the global middle class than any other country
  - China is expected to continue adding more people to the global middle class than any other country until overtaken by India in 2027.
- In 2008, China passed the \$6000 GPD per capita threshold, a level generally associated with increasing consumption and thus domestic demand, which is expected to continue driving the growth of the middle class in China.
  - One example of the increase in domestic demand associated with hitting the tipping point threshold is the spike in sales of automobiles, which went from sales of less one million per year in 2001 to over 10 million per year by 2009.

## Share of Middle Income in China Increases Sixfold from 2001 to 2011, but Majority Are Low Income or Poor

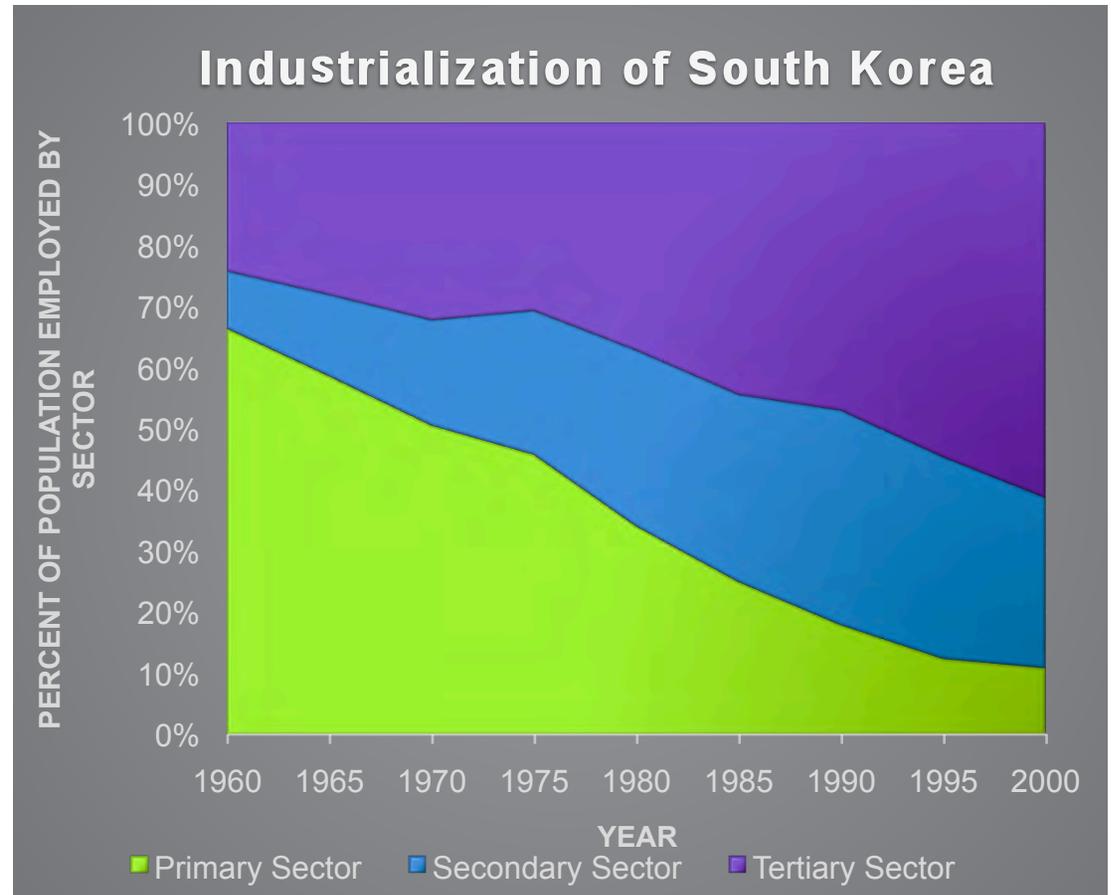
*% of China's population by income*



Note: The poor live on \$2 or less daily, low income on \$2.01-10, middle income on \$10.01-20, upper-middle income on \$20.01-50, and high income on more than \$50; figures expressed in 2011 purchasing power parities in 2011 prices.

# INDUSTRIALIZATION OF SOUTH KOREA AND EXPANDING MIDDLE CLASS

- In the 1960s, South Korea began an industrialization period.
- Between 1960 and 2000, the percentage of the population involved in the primary sector plummeted from 66 percent to 11 percent, while the percentage involved in the tertiary sector over the same period skyrocketed from 24 percent to 61 percent.
- A corresponding surge in the middle class\* occurred over this time frame, with the middle class growing from around 20 percent of the population in 1960 to around 50 percent by 1990.



# EXPLODING MIDDLE CLASS GROWTH IN EASTERN EUROPE IN 2000s

- After the fall of the Berlin wall and the collapse of the Soviet Union, many Eastern European countries saw dramatic economic hardships and shrinking GDPs.
- Following the turn of the millennium, several of these countries' economies began recovering, with significant expansion of the middle class in these countries.
  - After experiencing a 24 percent decrease between 1991 and 2001, Russia's GDP grew by 62 percent between 2001 and 2011.
  - Middle class (defined as \$10 - \$20) populations in Belarus grew from 21 percent in 2001 to 53 percent in 2011.
  - Similarly, middle class populations in Romania grew from 6 percent to 25 percent between 2001 and 2011.
- In total, middle class populations in Eastern European countries grew by 39 million between 2001 and 2011.

# IMPLICATIONS OF GROWTH OF GLOBAL MIDDLE CLASS: POLITICS

- The political impact of middle class growth is unclear, with various conclusions drawn by different organizations and researchers regarding the effect of middle class population within a country on the country's government
  - People in the global middle class may strongly encourage increasing democratization, as occurred in Brazil, Indonesia, and the Philippines.
  - Other research suggests that there is little evidence that a growing middle class places increased pressure for democracy, rather preferring stability in governance, as observed in Egypt and Thailand.
  - Some researchers suggest that greater levels of economic equality or income are key factors determining the quality of political institutions.
- Individuals entering the global middle class may demand increasing quality of public services.
- Some research suggests that increasing social and economic status (i.e., moving into the global middle class) increases political involvement.

# IMPLICATIONS OF GROWTH OF GLOBAL MIDDLE CLASS: POLITICS (CONT.)

- The willingness of those in the middle class to support social protection systems may be highly dependent upon the quality of these systems.
  - In countries with poor social services, individuals in the middle class may be unwilling to support these services with taxes, preferring conservative social programs as they see themselves as being negatively impacted by the social services.
  - In countries with high quality social services, the middle class may support increased taxation to support social services.
- Governments may face difficulties providing sufficient public services in countries with large informal sectors, as individuals employed in informal sectors\* do not pay income taxes.
  - In Brazil, Chile, Mexico and Bolivia, around 44 million of the 72 million middle class individuals are employed in the informal sector.
- Some researchers suggest that countries with larger middle class populations have more stable governments and have lower incidence of terrorism, corruption, and civil wars.

# IMPLICATIONS OF GROWTH OF GLOBAL MIDDLE CLASS: ECONOMY

- As incomes within a country begin increasing and individuals start entering the global middle class, these individuals present a significant opportunity for economic growth due to rapidly increasing domestic demand for non-essential goods and services affording by increasing discretionary income.
- Increased discretionary income alone will not necessarily lead to increased spending by the middle class; job security is critical to encourage individuals to save a lower percentage of income and thus increase consumption and spending, growing the economy.
- The global middle class spent \$33 - 35 trillion (in 2011 PPP) in 2015, accounting for one-third of the global economy and two-thirds of consumer spending.
- The global middle class market (in terms of GDP) is growing annually at 4 percent, higher than the global GDP growth.
- The growing global middle class in emerging and developing countries also presents an opportunity for economic growth in developed countries as increasing consumption in these emerging and developing countries can be filled by exports from developed countries; however, this will require supporting international trade policy and flexibility in business development in developed countries.

# IMPLICATIONS OF GROWTH OF GLOBAL MIDDLE CLASS: SOCIETY

- Individuals entering the global middle class may demand increased social and economic equality.
- As people enter the global middle class due to increasing income, they experience a change in lifestyle associated with increased discretionary income.
  - The **middle class lifestyle** is a term that refers to spending on luxury items and services, taking vacations, home ownership, automobile ownership, and helping children obtain higher (tertiary) education.
- Some research suggests that a growing middle class is associated with higher levels of happiness, which has numerous societal benefits.
- A growing global middle class population within a country generally is associated with increasing economic equality, as quantified by the **Gini Index**, while a shrinking global middle class is associated with increasing economic inequality.
  - However it is unclear if decreasing income inequality alone will cause growth in the middle class.
- Higher rates of tertiary education tend to grow the global middle class.
- Increasing incomes associated with growing middle class population within a country may contribute to a decrease in fertility rates.

# IMPLICATIONS OF GROWTH OF GLOBAL MIDDLE CLASS: TECHNOLOGY

- As countries begin transitioning from primary sector to secondary and tertiary sectors, they reap the **advantages of backwardness**, which essentially is the benefits of and rapid economic growth (and middle class growth) associated with importing technologies from advanced economy countries.
  - As countries import these technologies, they face diminishing returns on this process as the advantages decrease, and thus countries must begin innovating during this process for sustained economic growth.
  - Countries that are unable to innovate are in danger of the **middle income trap**, which refers to situation where a country experiences rapid economic growth and expansion of its middle class, but is unable to sustain economic growth and transition from a middle income country to high income country.
- Energy efficiency technology and other technology that increase resource utilization efficiency can help reduce the environmental damage often associated with economic growth and corresponding increasing consumption of a growing global middle class.

# IMPLICATIONS OF GROWTH OF GLOBAL MIDDLE CLASS: ENVIRONMENTAL

- An expanding middle class will increase the strain on resources and accelerate environmental impact as consumption increases, particularly related to housing, transportation, and food consumption.
  - This may be mitigated to some degree by the increasing urbanization associated with increasing middle class populations as individuals living in urban environments tend to have a smaller carbon footprint per capita than those living in rural environments, primarily due to the decreased carbon demand of transportation.
- Additionally, as increasing income and a growing middle class population are associated with decreasing fertility rates and increased education (demographic dividend), the total consumption for the country or region may actually be lower than if the country had not experienced a growing middle class despite increasing individual consumption per capita.
- Individuals in the global middle class may have higher expectations for increased energy efficiency, support conservation efforts, and demand decreased pollution
  - Individuals in the global middle class may also be willing to pay a premium for more environmentally-friendly products, an attitude frequently associated with the middle class lifestyle.

# THE PATH FORWARD: GOVERNMENT ACTION

- Governments experiencing rapid growth of the global middle class segment of their population in emerging and developing countries need to encourage technological innovation in order to sustain long-term economic growth and avoid falling into the middle income trap.
- Governments may need to increase taxes in countries with rapidly expanding middle classes to be able to provide high quality public services, such as public education and social securities, desired by the middle class.
- It is critical that governments design policies that promote social and economic mobility in order to bolster middle class growth and decrease the chances of those entering middle class from sliding back into poverty due to shocks such as drought, injury, illness, or loss of employment.
- Governments should create policies that aim to limit the economic impact of growing middle classes as consumption increases.
- Governments in developed countries should design policies encouraging international trade to benefit from growing middle class consumption in emerging and developing nations.

# RESOURCES

- The following resources provide further information on this topic:
  - Kharas, Homi. "How a Growing Global Middle Class Could Save the World's Economy." *Pew Trust Magazine*. July 5, 2016.
  - Kharas, Homi, and Geoffrey Gertz. "The New Global Middle Class: A Cross-Over from West to East." *Wolfensohn Center for Development at Brookings* (2010): 1-14.
  - Kharas, Homi. *The Unprecedented Expansion of the Global Middle Class: An Update*. Brookings Institution, 2017.
  - Pezzini, Mario. "An Emerging Middle Class." *OECD Observer* 288 (2012): 64.
  - Ncube, Mthuli, Charles Leyeka Lufumpa, and Steve Kayizzi-Mugerwa. "The Middle of the Pyramid: Dynamics of the Middle Class in Africa." *Market Brief* 20 (2011).
  - Kochhar, Rakesh. *A Global Middle Class is More Promise than Reality: From 2001 to 2011, Nearly 700 Million Step Out of Poverty, But Most Only Barely*. Pew Research Center, 2014.
  - Wilson, William T. "The Great Equalizer: The Rise of the Emerging Market Global Middle Class." *SIEMS Issue Report* (2010).
  - Wilson, William T. "Hitting the Sweet Spot: The Growth of the Middle Class in Emerging Markets." London: Ernst and Young (2013).
  - Kharas, Homi, and Geoffrey Gertz. "The New Global Middle Class: A Cross-Over from West to East." *Wolfensohn Center for Development at Brookings* (2010): 1-14.
  
- Additional research materials and information sources regarding this topic can be found in the associated *Literary & Scholastic Resource List*.