The Impact of Age Demographics on Maryland’s Economic and Tax Revenue Outlook

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Age Structure and the Labor Force

Chart 1: Working Age Population And The Labor Force (% Change 2 Yr MA)

Source: US Bureau of Labor Statistics; Moody’s Analytics; Bureau of Revenue Estimates
Age Structure and the Labor Force

Chart 2: US Labor Force Participation Rate (%)

Age Structure and Productivity

Chart 3: Age Distribution of MD Residents

Source: US Census; MD Department of Planning
Low Employment and Productivity Growth Means Low GDP Growth

Chart 4: Change in US Employment, Productivity, GDP - 3 Yr MA

Economic Impacts

• Low productivity and employment growth = low economic growth
• A population at the ends of the age spectrum will earn, consume, save, and invest less than a middle aged population
• Falling real income for younger workers means lower consumption, savings, and delayed household formation
Economic Impacts (cont.)

• Federal Reserve economists found changes in demographics:
  – explain nearly all the slowdown in trend growth and decrease in equilibrium real interest rates since the 1980s
  – caused steepest declines after 2000
  – caused US Labor participation to peak in 2000

• Productivity growth will increase as millennials age

• Investments in capital and technology can increase productivity in the long run
Tax Impacts

• Lower nominal GDP growth means lower tax revenue growth

• Older population means lower income and consumption tax revenue growth
  – Preferential tax treatment for older filers
  – Older individuals shift spending to non-taxable services such as out-of-pocket healthcare

• Lower income and consumption tax revenue growth from younger workers
Analysis of Maryland Tax Data

Chart 6: Estimated Change in Tax Revenue if 2014 had Age Structure of X-Axis Year

Source: MD Bureau of Revenue Estimates
Analysis of Maryland Tax Data

• Holds the 2014 average tax per person in each age cohort and total # of taxpayers constant

• Changes the age distribution of that total # of taxpayers

• Allowing for growth in total # of taxpayers, negative impact of age structure will continue to grow through 2040 – peak negative impact in 2035
MD Tax Return Participation Rate

- TRPR = % of the population that files a tax return
  - Includes joint filers. Income of joint filers is evenly divided among both individuals
- Requires combining tax return filing numbers with survey based population estimates
MD Tax Return Participation Rate

Chart 7: Tax Return Participation Rate* (Indexed, 2007 = 100)

*Including only "timely filed" returns

Source: MD Bureau of Revenue Estimates
Immigration

• With no immigration since 1965*:  
  – US population in 2015 would be 252 million rather than 324 million  
  – Median age 41 rather than 38  

• With no immigration after 2015*:  
  – US population in 2065 would be 338 million and shrinking rather than 441 million and growing  

• From 2000 to 2010, immigrants accounted for 57.1% of MD labor force growth†

* Pew Research Center  
† Maryland Immigration Commission
Unauthorized Immigration

- Population in MD around 250,000 – down slightly from pre-recession peak*
- Subject to conditions, unauthorized immigrants in MD can:
  - Qualify for in-state tuition rates – effective 2013
  - Obtain a driver’s license – effective 2014
- Use Individual Taxpayer Identification Numbers (ITINs) to file taxes

* Migration Policy Institute
ITIN Use in Maryland

Chart 8: Number of Maryland Taxpayers Using ITINs

Source: MD Bureau of Revenue Estimates
Thank You