Fiscal Challenge 2018

Team #26
Increased costs to Social Security and Medicare

An unsustainable fiscal path and the need for budget reduction
### The Current Spending Trajectory

#### Debt-GDP ratio, past and future

<table>
<thead>
<tr>
<th></th>
<th>1960’s-2008</th>
<th>April, 2018</th>
<th>2028</th>
<th>2048</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>35%</strong></td>
<td>35%</td>
<td>78%</td>
<td>&gt;100%</td>
<td>&gt;200%</td>
</tr>
</tbody>
</table>
Interest Rates and the Debt-to-GDP Ratio

Average interest rate paid on national debt:
- 1980s: 10.5%
- 1990s: 6.9%
- 2000s: 4.8%
- 2010–17: 2.1%
- 2018–28: 3.2% (CBO projection)
- 2048: 4.4% (CBO projection)

Current - Policy Baseline
Average Interest Rate Rises to 4.4% by 2048

Source: Riedl, 2018
The Current Spending Trajectory

- Retirement of Baby Boomers
- Medicare Spending
- Social Security Spending
Our Proposal

Includes changes to:

- Social Security
- Medicare
- Medicaid
- Education
- Defense
- Immigration
- Criminal Justice
- Subsidies
- Taxation

With the goal of stabilizing the debt to GDP ratio by ensuring that the 6% GDP increase in the deficit that would occur under the current spending trajectory does not occur.
Our Proposal: Assumption

- Assumption: under our policy, expectations for GDP, inflation, population growth, greenhouse gas emissions, and excess healthcare costs will remain the same as under current policy.
- We use the CBO’s Long Term Baseline Projections for these variables to project cost/savings changes for our policies.
Social Security Proposal

- Increase in the full-benefit retirement age from 67 to 70
- Reduction in benefits for individuals with above-median income
- Increase in the years included in AIME
- Index Social Security and other programs using Chained-CPI-U
- Increase the Social Security Payroll Tax and the Taxable Maximum
Increase in Full-Benefit Retirement Age

- Increase the Full-Benefit Retirement Age from 67 to 70
- Would account for a reduction in the deficit totalling 0.5 percentage points of GDP
Reduction in Benefits

Under current law, for each $1 increase in the AIME, the PIA increases by...

- $0.90
- $0.32
- $0.15

Using pure price indexing, for each $1 increase in the AIME, the PIA increases by...

- $0.71
- $0.25
- $0.12
Increase in years included in AIME

- Reduce outlays by two percent
- Eliminate 24 percent of the actuarial deficit
- Cut an addition 0.4 percentage points of GDP out of social security deficit
Index using Chained-CPI-U

Save 44 billion in 2028

Equivalent to 0.2% of GDP in annual savings by 2033

Savings will continue to grow to roughly 0.3% of GDP by 2049
Increase Social Security Payroll Tax by 1%

Change in Revenues (billions of dollars)
Subject Earnings Greater than 250,000 to the Payroll Tax

Subject earnings greater than 250,000 annually to payroll tax

Taxable Maximum would eventually converge to this threshold

Expected to Generate Revenue of 1.1% GDP Annually
Medicare

- We address Parts A, B, and D
- Reduce annual Medicare expenditures by 1.4% of GDP by 2048
Raising MEA from 65 to 67

- Increase MEA by 3 months every year starting in 2023, until the MEA reaches 67 in 2032
- Effect: Deficit would decrease by $15-22B during the period of 2023 to 2028
- Goals: Eventually cut down medicare expenditure by 0.07% of GDP
Implementing Premium Support for Parts A and B

**Implement**

Premium support for Parts A and B

**Method**

Average-bid pricing system to be more generous towards seniors and keep up with healthcare costs

**Projected Outcomes**

- Decrease annual Medicare spending by $50 billion by 2026
- Savings totalling roughly 0.5% of GDP by 2048.
Increase premiums for enrollees in Parts B and Part D

**Part B**
Increase premium cover from 25% to 35% of total enrollees
Gradual increase of rate: 2 percentage points annually till it reaches 35%

By the end of this period, premiums for Part B would reach $281 per month

**Part D**
Increase premium cover from 25.5% to 35% of total enrollees
Gradual increase of rate: 1.5 percentage points in the first year and then by 2 percentage points thereafter, until the premiums for both parts covered 35% of costs

By the end of this period, premiums for Part B would reach $77 per month
Increasing Medicare Payroll Tax

- 1 percentage point increase in the Medicare Payroll Tax
- Goal: save 0.36 percentage points of GDP annually by 2048
Medicaid Proposals

Deficit reduction totalling 0.7% of GDP from:

- Caps on spending per enrollee
- Repeal of the 90% reimbursement rate for non-disabled and working-age adults
- Elimination of the Safe Harbor Threshold
Additional Proposals
Education

Increasing application for and recipiency of available state and institutional need-based aid

Tying the FAFSA form directly to the IRS annual tax data form

Hiring aid officers
Defense

- Replacement of military personnel in commercial roles with lower-cost civilian personnel
- Stoppage in the purchase and development of new F-35 fighter jets and Ford Class Aircraft Carriers
- Reduction of Naval Ship Construction Budget down to historical levels
Immigration and the Current State of the H1B Visa

H-1B visa applications have exceeded supply for the past five years

Number of capped H-1B applications, by fiscal year, in thousands

Due to rollover from previous fiscal years, some application totals may exceed the cap; for fiscal years 2004, 2006-2007 and 2010-13, the cap was reached but total applications were not published; data not available for fiscal years 1990-1999
Benefits of Removing H1B Visa Cap

- Net Positive for the Federal Budget
- Significant Increases in Total Factor Productivity
- Wage gains for both High and Low Skilled Native Workers
Current State of H-2A and H-2B Visa

Wait Times of 20 Years

American Demand for Immigrant Labor

High Incentive to Enter US Illegally
Benefits of “Market for Visas”

- Reduction of Dangerous Border Smuggling and Illegal Border Crossings
- Estimated Revenue of $2.8 Billion for the Federal Government
Legalizing Marijuana

- Reduce Government Spending by $7.7b – $13.7b, $2.4b to the Federal Government
- Increase Tax Revenues by $2.4b – $6.2b, $1.6b – $4.1b to the Federal Government
- Add $5 trillion to the U.S. GDP
Crop Insurance Program

- Reduce subsidy to an average of 40% of the crop insurance premiums
- Limiting the federal reimbursement to crop insurance companies for administrative expenses to 9.25% of estimated premiums and limit the rate of return on investment for those companies to 12% each year
- In 2030 re-evaluate the program for additional cuts with the goal of eventually almost entirely eliminating the program
- This saves $21 billion from 2020 to 2028

<table>
<thead>
<tr>
<th>Year</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>Total</th>
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<tbody>
<tr>
<td>Billions of Dollars Saved</td>
<td>0</td>
<td>0.2</td>
<td>2.3</td>
<td>2.6</td>
<td>2.6</td>
<td>2.6</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>21</td>
</tr>
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Intangible Drilling Costs Expensing Deduction

- Allows producers to deduct 70% of intangible drilling expenses immediately and amortize the rest over five years.
- Oil industry very different today from when it was first implemented.
- Repealing the intangible drilling costs expensing deduction will save between $15 billion and $20 billion over the next decade.
Carbon Tax

- Tax on the emission of greenhouse gasses
- Increase in energy prices and related goods, processes, and services
- According to the CBO a tax $25 per metric ton of emissions adjusted for inflation would add a net 0.4 to 0.5 percentage point increase in GDP
- Can also reduce expenses due to climate change

By 2049:
Expected to generate 0.15-0.30% of GDP in Revenue
Conclusion

Annual before-interest deficit reduction close to 6% of GDP by 2049

Additional revenues of roughly 1.6% of GDP

Reduction in expenditures of roughly 4.4% of GDP
Conclusion

Significant reduction in level of debt

Sustainable fiscal path going forwards
Thank you for your time!
Appendix

- Deficit Reduction
- Net Debt Reduction, Total and as a % of GDP
- Annual Population Growth Rates by Age Group over the next 30 years, as projected by the CBO
- Social Security Spending (% of GDP) before and after
- Medicaid Spending Per Enrollee
- Medicaid Reimbursement Rate Threshold
- Crop Insurance Details
- Elimination of Safe Harbor Threshold Details
- Effects of Proposed Immigration Programs on Wages- H1B
- Effects of Proposed Immigration Programs - H2B, H2A
- Effects of Proposed Defense Changes on National Security
- Additional Possible Defense Cuts
- Additional Subsidies Cuts and Fees
- Current Medicare Spending Details
- 5% Value Added Tax
- Social Security Trust Fund Details
- Average Indexed Monthly Earnings Details
- CPI-U V.S. Chained CPI-U
- Explanation of Projections
Deficit Reduction

Before Interest Deficit/Surplus (-/+ ) as a Percentage of GDP

Deficit/Surplus (-/+), before and after
Net Debt Reduction, Total and as a % of GDP
Annual Population Growth Rates by Age Group over the next 30 years, as projected by the CBO
Social Security Spending (% of GDP) before and after
Medicaid Spending Per Enrollee

Apply Caps to All Eligibility Categories, With Growth of Caps Based on the CPI-U

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<th></th>
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<tbody>
<tr>
<td>Changes in Outlay</td>
<td>0</td>
<td>-1</td>
<td>-3</td>
<td>-40</td>
<td>-64</td>
<td>-82</td>
<td>-102</td>
<td>-123</td>
<td>-146</td>
<td>-169</td>
<td>-731</td>
</tr>
<tr>
<td>Changes in Revenue</td>
<td>0</td>
<td>*</td>
<td>-1</td>
<td>-1</td>
<td>-2</td>
<td>-2</td>
<td>-3</td>
<td>-5</td>
<td>-6</td>
<td>-8</td>
<td>-28</td>
</tr>
<tr>
<td>Decrease in Deficit</td>
<td>0</td>
<td>-1</td>
<td>-3</td>
<td>-39</td>
<td>-62</td>
<td>-80</td>
<td>-98</td>
<td>-118</td>
<td>-140</td>
<td>-162</td>
<td>-703</td>
</tr>
</tbody>
</table>
Medicaid Reimbursement Rate Threshold

- Recent eligibility expansions and natural caseload increases have raised federal Medicaid spending from 1.3% to 1.9% of GDP since 2007—and spending is projected to reach 2.8% of GDP within 30 years.
- According to Riedl (2018), congress should first address the 90% long-term federal reimbursement rate for the newly eligible population of nondisabled, working-age adults with higher incomes that were implemented in 2014.
- States should continue to be allowed to include these newly added adults in their Medicaid programs; but no rational explanation exists for Washington subsidizing nondisabled, working-age adults on Medicaid with a much higher reimbursement rate than children, the elderly, and the disabled. This higher federal reimbursement rate is currently in the process of dipping from 100% to 90% between 2016 and 2020. Congress should gradually repeal this higher reimbursement rate.
Crop Insurance Details

Inefficiencies of the program:

- Subsidizing the same industry twice over
- Reinsuring the companies
- Likely Limited Actual Risk-Management Effect
  - Inequities of distribution of payouts
    - 68% of all premium subsidies -> top 10% of crop sales distribution
    - Top 2% receives ~$50 per acre in subsidies
    - Average per-acre subsidy $12.28
  - Alternative methods of risk management common among farmers
  - Variety of other federal programs
Elimination of Safe Harbor Threshold Details

- Takes effect October 2020 to allow states time to change their laws
- Effect highly variable because it depends on how states choose to respond

Annual Savings Breakdown:

<table>
<thead>
<tr>
<th>Year</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Billions of Dollars Saved</td>
<td>0</td>
<td>0</td>
<td>34</td>
<td>37</td>
<td>39</td>
<td>42</td>
<td>44</td>
<td>47</td>
<td>49</td>
<td>52</td>
<td>344</td>
</tr>
</tbody>
</table>
(Perr, Shih, Sparber 2014) find we find that “H-1B-driven increases in STEM workers in a city were associated with significant increases in wages paid to college educated natives.

Furthermore, they found that although less significant, wages for non-college educated natives also rose.

Their conclusion was that Total Factor Productivity (TFP) grew considerably as a result of Foreign STEM workers.
Effects of Proposed Immigration Programs - H2B, H2A

- A 2010 analysis by the US Chamber of Commerce (Zavodny, Jacoby) find that the issuing of H2B visas does not have any significant effect on low-skilled native wages.

- A streamlined visa process would allow H2B visas to respond more accurately to market forces, allowing for significant efficiency gains.

- Additionally:
  - Decreased potential for under-the-table exploitative wages significantly below minimum wage
  - Removal of a source of cartel income
Effects of Proposed Defense Changes on National Security

- Replacing some military personnel with civilians
  - Civilians would replace thousands of military personnel in non-combat military units
  - Furthermore, civilians are not subject to frequent transfers allowing the military to employ less civilians on average, while maintaining quality of service
  - Thus, replacing military personnel with civilians in the non-combat units would not have a significant effect on national security

- Stopping Production of the F-35
  - Improved models of the F-16 and F/A-18 would be more than able to deal with the likely threats that the United States will face in the coming years
  - Furthermore, F-35’s that have already been built are sufficient to operate against enemies with advanced air defense systems

- Reducing Navy Construction Budget to Historical Levels
  - Under our plan the Navy’s fleet would still grow to 308 ships by 2028, although it would steadily decline thereafter

- Ceasing production of Ford Class Aircraft Carriers
  - The three aircraft carriers already in production, which would be completed under our plan, would allow for the US fleet to maintain its current size (11) well into the future
  - The size of the US fleet would not decrease significantly until around 2048, when it would be comprised of 6 aircraft carriers
  - Likely that future technology (e.g. long-range supersonic anti-ship cruise missiles, anti-ship ballistic missiles, very quiet submarines, and satellite) could make carriers much less effective
## Additional Possible Defense Cuts

<table>
<thead>
<tr>
<th>Cuts</th>
<th>10 Year Savings</th>
</tr>
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<tbody>
<tr>
<td>Reduce the Size of the Nuclear Triad</td>
<td>$13.1 Billion</td>
</tr>
<tr>
<td>Cancel the Long-Range Standoff Weapon</td>
<td>$13.3 Billion</td>
</tr>
<tr>
<td>Defer Development of the B-21 Bomber</td>
<td>$44.9 Billion</td>
</tr>
<tr>
<td>Modify TRICARE Enrollment Fees and Cost Sharing for Working-Age Military Retirees</td>
<td>$11.8 Billion</td>
</tr>
<tr>
<td>Reduce the Size of the Bomber Force by Retiring the B-1B</td>
<td>$17.9 Billion</td>
</tr>
<tr>
<td>Reduce the Size of the Fighter Force by Retiring the F-22</td>
<td>$29.9 Billion</td>
</tr>
<tr>
<td>Cancel the Ground-Based Midcourse Defense System</td>
<td>$20.3 Billion</td>
</tr>
<tr>
<td>Cancel Development and Production of the New Missile in the Ground-Based Strategic Deterrent Program</td>
<td>$30.4 Billion</td>
</tr>
</tbody>
</table>
## Additional Subsidies Cuts and Fees

<table>
<thead>
<tr>
<th>Cuts</th>
<th>10 Year Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase Passenger Fee for Airline Security</td>
<td>$20.5 billion</td>
</tr>
<tr>
<td>Convert the Home Equity Conversion Mortgage Program Into a Direct Loan Program</td>
<td>$3.1 billion</td>
</tr>
<tr>
<td>Lowering the reference prices for PLC</td>
<td>Unknown</td>
</tr>
<tr>
<td>Lessen/end the practice of royalty reliefs</td>
<td>Unknown</td>
</tr>
<tr>
<td>Capping PLC and ARC payouts</td>
<td>Depends on cap</td>
</tr>
<tr>
<td>Eliminate Percentage Depletion for Hard Mineral Fossil Fuels &amp; for Oil &amp; Natural Gas Wells</td>
<td>$11.75 billion</td>
</tr>
<tr>
<td>End US Sugar Program</td>
<td>Unknown</td>
</tr>
<tr>
<td>Treat “Carried Interest” as income</td>
<td>$18+ billion</td>
</tr>
</tbody>
</table>
Current Medicare Spending Details

- Annual U.S. health care spending is estimated to grow at an average rate of 5.5 percent through 2026 and reach $5.7 trillion, or 19.7 percent of GDP by 2026.
- Health spending is projected to grow 1.0 percentage point faster than Gross Domestic Product (GDP) per year over 2017-26 period.
- Medicare is currently the largest single purchaser of healthcare in the United States and consists about 22%. 

![Pie chart showing Medicare spending details]
5% Value Added Tax

- Standard tax in most developed countries
- Would raise $380 billion in FY2028, or 1.2% of GDP
Social Security Trust Fund Details

- Includes Disability Insurance Trust Fund & Old-Age and Survivors Insurance Trust Fund
- In 2017
  - Average of the 12 monthly interest rates: 2.313%
  - Annual effective interest rate (average rate of return on all investments) 2.988%
- Began to be used in 2018 to supplement the income of the Social Security
- DI Trust Fund currently projected to last to 2032
- OASI currently projected to last to 2034
- Cut to 75% of benefits when trust fund runs out if no changes are made
Average Indexed Monthly Earnings Details

- Currently uses top 35 years of earnings
- Current Primary Insurance Amount bend points for retirees turning 62 in 2019:
  - 90% of the first $926
  - 32% of $926-$5,583
  - 15% of anything over $5,583
  - Example PIA of someone with an AIME of $5,583
    - \[ .9 \times 926 + .32(5583 - 926) = 2,323.64 \Rightarrow PIA = $2,323.64 \]
- Currently indexed using the National Average Wage Index for the year a retiree turns 60
CPI-U vs. Chained CPI-U

- The traditional versions of the CPI don’t fully account for substitution effects.
- Therefore, they grow faster than cost of living does.
- Chained CPI-U is an estimate of cost-of-living changes from one month to the next, which is calculated based off of market baskets of goods for each month.
Explanation of Projections

- Rely heavily on the CBO’s 30-year projections
- Our estimates are in many ways conservative as:
  - It is difficult to project the effects of our policies for immigration, education, and marijuana legalization on GDP, except to say that we expect them to be positive
  - We don’t account for the effect of changing the FBRA on the LFPR, except to say that we expect this effect to be positive as well
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