Achieving fiscal sustainability: alternative scenarios for Scotland

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Overview

- IFS basic model applies OBR assumptions about the UK to Scotland
  - Suggests an independent Scotland would have a greater and more immediate long-run fiscal problem than the UK as a whole
- “Fiscal gap”: to get public sector debt back to 40% of national income by 2062–63
  - Scotland: requires 4.1% of national income tightening
  - UK: requires 0.8% of national income tightening
- Results are sensitive to a number of assumptions
  - North Sea production and revenues; migration; productivity growth; debt allocation; interest rate on public sector debt
- Show sensitivity to a variety of assumptions
  - Main message – that Scotland faces tougher long-run fiscal challenges than UK as a whole – remains
North Sea revenues

• Basic model:
  – Decline based on OBR forecast to 2017–18
  – Constant as % national income thereafter

• Revenues likely to decline by more than this in the long-run
  – Basic model assumes NS revenues remain at 2.2% of Scottish GDP
  – OBR central projection is for revenues to fall to 0.4% of GDP by 2040

• Revenues from the North Sea might be higher in the medium-term
  – Scottish Government suggests production and prices will be higher in medium-term, leading to higher revenues

• Alternative scenario: ‘North Sea decline (1)’
  – North Sea revenues decline as suggested by OBR central forecast

• Alternative scenario: ‘North Sea decline (2)’
  – Based on most optimistic, scenario 5, from Scottish Government, *Oil and Gas Analytical Bulletin*; then declines over longer-run
Alternative forecasts for North Sea revenues

Source: Amior, Crawford and Tetlow (2013a), Figure 3.5.
Alternative scenarios: North Sea revenues
Public sector net borrowing

Revenue replacement (IFS basic model)
North Sea decline (1)
North Sea decline (2)

Source: Amior, Crawford and Tetlow (2013a), Figure 3.6.
Alternative scenarios: North Sea revenues
Public sector net debt

Percent of national income

Revenue replacement (IFS basic model)
North Sea decline (1)
North Sea decline (2)

Fiscal gap = 5.7%
Fiscal gap = 3.6%

Source: Amior, Crawford and Tetlow (2013a), Figure 3.7.
Productivity growth

- Basic model: 2.2% a year growth in labour productivity
- Average productivity growth in Scotland could be lower than this
  - Declining output from North Sea
  - To maintain average growth of 2.2% requires onshore productivity to increase more rapidly
- Alternative scenario: ‘1.7% productivity’
  - Onshore economy experiences average productivity of 2.2%
  - North Sea output disappears entirely by 2062–63
  - Average productivity growth in Scotland would be 1.7% a year
- In the model, lower productivity growth...
  - Revenues and non-interest spending grow less quickly in real terms, but amount to same share of national income as in basic model
  - But accumulated debt becomes more burdensome to service
Alternative scenarios: productivity growth
Public sector net borrowing

Source: Amior, Crawford and Tetlow (2013a), Figure 3.3.
Alternative scenarios: productivity growth
Public sector net debt

Percent of national income

2.2% a year (IFS basic model)
1.7% a year

Fiscal gap = 4.5%

Source: Amior, Crawford and Tetlow (2013a), Figure 3.4.
Migration

• Basic model: ONS ‘low migration’ projection
  – Net inward migration averaging 9,000 per year
• Migration to an independent Scotland could be higher than this
  – Independent Scottish government might pursue more liberal immigration policy than currently being pursued by UK government
• Alternative scenario: ‘high migration’
  – ONS ‘high migration’ projection
  – Net inward migration averaging 26,000 a year
• In the model, greater inward migration...
  – Migrant population on average younger than existing Scottish population
  – Increases tax revenues
  – Increases public spending but less than revenue increase
  – Borrowing and debt rise less rapidly
Alternative scenarios: migration
Public sector net borrowing

Source: Amior, Crawford and Tetlow (2013a), Figure 3.1.
Alternative scenarios: migration
Public sector net debt

Fiscal gap = 3.0%

Source: Amior, Crawford and Tetlow (2013a), Figure 3.2.
Debt level and interest rate

- Basic model:
  - Population share of debt
  - 5% interest rate from 2026–27

- Scotland could inherit a different share of accumulated debt

- Scotland might face a higher interest rate
  - Small economy with no track record on fiscal management
  - What currency would Scotland adopt? What currency would debt be denominated in?

- Alternative scenario: ‘40% debt, 5% interest rate’
  - Illustrative figure: approximately pre-crisis level of UK debt

- Alternative scenario: ‘Population share of debt, 5.72% interest rate’
  - Armstrong and Ebell (2013) estimate that Scottish interest rate would be 0.72 to 1.65 percentage points above UK rate
Alternative scenarios: debt level and interest rate
Public sector net borrowing

Percent of national income

- Population share of debt, 5% interest rate (IFS basic model)
- Population share of debt, 5.72% interest rate
- 40% of GDP debt, 5% interest rate

Source: Amior, Crawford and Tetlow (2013a), Figure 3.8.
Alternative scenarios: debt level and interest rate

Public sector net debt

Percent of national income

- Population share of debt, 5% interest rate (IFS basic model)
- Population share of debt, 5.72% interest rate
- 40% of GDP debt, 5% interest rate

Fiscal gap = 4.6%
Fiscal gap = 3.2%

Source: Amior, Crawford and Tetlow (2013a), Figure 3.9.
Composite scenarios

- ‘Optimistic’ scenario
  - 40% debt
  - ‘high migration’
  - North Sea decline (2)

- ‘Pessimistic’ scenario
  - Population share of debt
  - 1.7% productivity growth
  - North Sea decline (1)
  - (But still assume 5% interest rate on debt)
Composite scenarios
Public sector net borrowing

Percent of national income

-5%  0%  5%  10%  15%  20%  25%

- Scotland: basic model
- Scotland: 'optimistic' scenario
- Scotland: 'pessimistic' scenario
- UK

Source: Authors’ calculations and Figure 4.1 of Amior, Crawford and Tetlow (2013a).
Composite scenarios
Public sector net debt

Source: Authors’ calculations and Figure 4.2 of Amior, Crawford and Tetlow (2013a).
Closing the fiscal gap in Scotland?

- Tax increases and/or spending cuts required
- Revenue yield from example tax increases (in 2014–15)
  - +1ppt on main rate of VAT = £430 million
  - +1ppt on basic rate of income tax = £365 million
- Indicative scale of spending squeeze required
  - £3 billion would equate to 6% of total non-interest spending, or 8% of public service spending
- Policies mooted by current Scottish government
  - Increase spending: higher aid spending, delay or scrap planned rise in state pension age, reverse cuts to housing benefit
  - Reduce spending: cut defence spending
Conclusions

- Independent Scotland would face unsustainably increasing levels of public sector debt over next 50 years unless further tax increases or spending cuts were announced.
- Fiscal gap facing Scotland would be larger than for the UK:
  - Larger gap between spending and revenues at baseline
  - More rapidly ageing population
  - Much more reliant on revenues from the North Sea, which are likely to decline over the longer-run.
- This conclusion is robust to a wide range of possible assumptions.
- Long-run fiscal pressures should form important backdrop to any discussions about changes to tax/spending policies of independent Scotland:
  - Independent Scotland can achieve fiscal sustainability but would need to make some difficult decisions.