

Research Bulletin 18/11 | An International Perspective on Northern Ireland's Economic Performance – Part 2

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Summary

Northern Ireland's draft Industrial Strategy aims to put Northern Ireland in the top three most competitive small advanced economies by 2030. However, performance on a number of key economic indicators suggest robust strategy and policy developments are needed in order to make this target achievable.

Employment growth fluctuates greatly, with most recent data for 2017 showing that Northern Ireland is lagging behind the SAE group, although this is a naturally volatile measure and therefore should be considered with caution. Encouragingly, household disposable income has been increasing and Northern Ireland outperforms six other SAEs, nevertheless, this indicator still falls below the SAE group average and this gap has been widening in recent years. Income inequality, measured by the Gini coefficient, suggests that Northern Ireland performs reasonably well compared with the SAE group average. However, overall, Northern Ireland failed to demonstrate performance above the lower/mid-range across these three indicators and therefore more work will be needed if Northern Ireland is to meet the draft Industrial Strategy's ambitious target.

Introduction

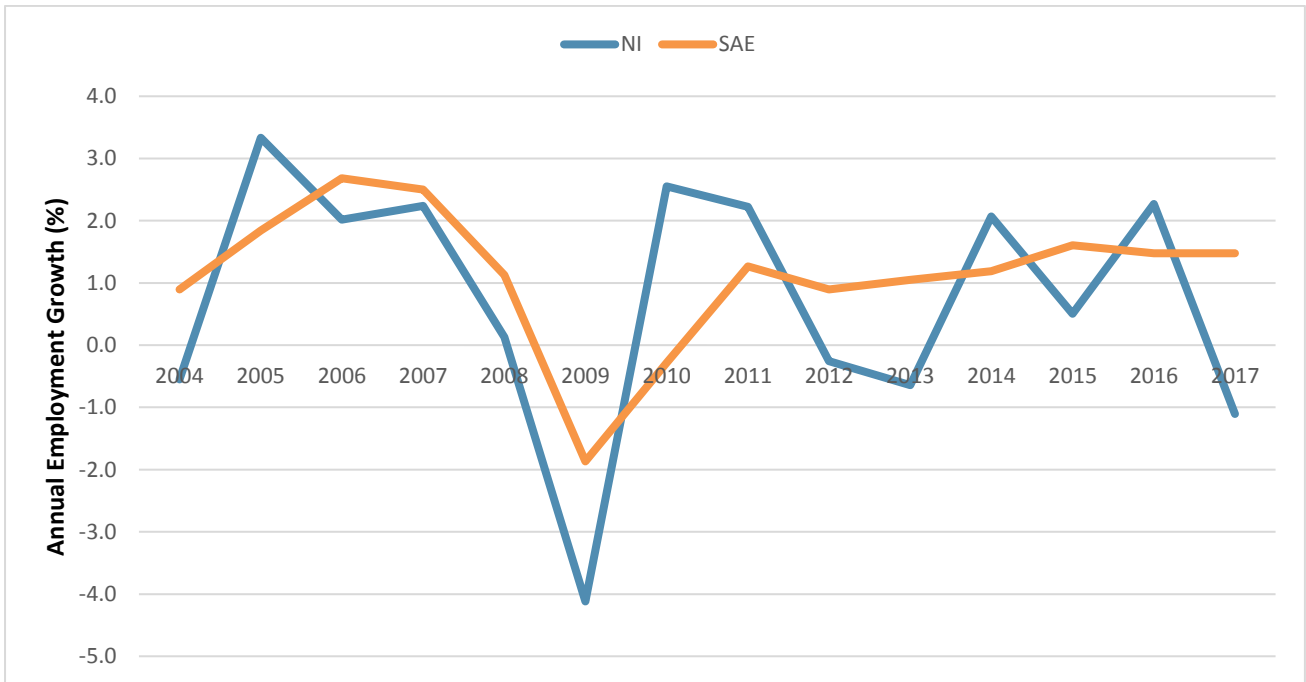
A key objective within the draft Industrial Strategy for Northern Ireland (NI)ⁱ is to position NI in the top three most competitive small advanced economies (SAEs) by 2030. To achieve this, the strategy highlights the importance of benchmarking NI against other SAEs. To date, the Economic Advisory Group (EAG) has produced competitiveness reports in 2013ⁱⁱ and 2016ⁱⁱⁱ, with DfE Analytical Services also undertaking competitiveness benchmarking in 2017^{iv}. The consistent message across all three reports is that NI lags behind the leading SAEs on a range of economic indicators.

Research Bulletin Article 18/1 published in April 2018^v discussed how NI performed relative to other SAEs across three indicators - economic growth, living standards and productivity. This article will build on this previous assessment by looking at a further three indicators - employment growth, household disposable income and income inequality. Comparisons will be made across a group of 18 other SAEs used as benchmarks, in order to learn from their success and establish whether important lessons can be learnt.

Employment Growth

Employment growth, measured by the number of persons in employment^{vi} is an important indicator to gauge how well an economy is using all available labour resources and allows for a robust measure of progress towards full employment^{vii}. Figure 1 illustrates annual employment growth, from 2004-2017 for NI, compared with the SAE group average.

Figure 1: Annual Employment Growth, 2004-2017



Sources: International Labour Organisation (ILO), Office for National Statistics (ONS) Labour Force Survey (LFS)

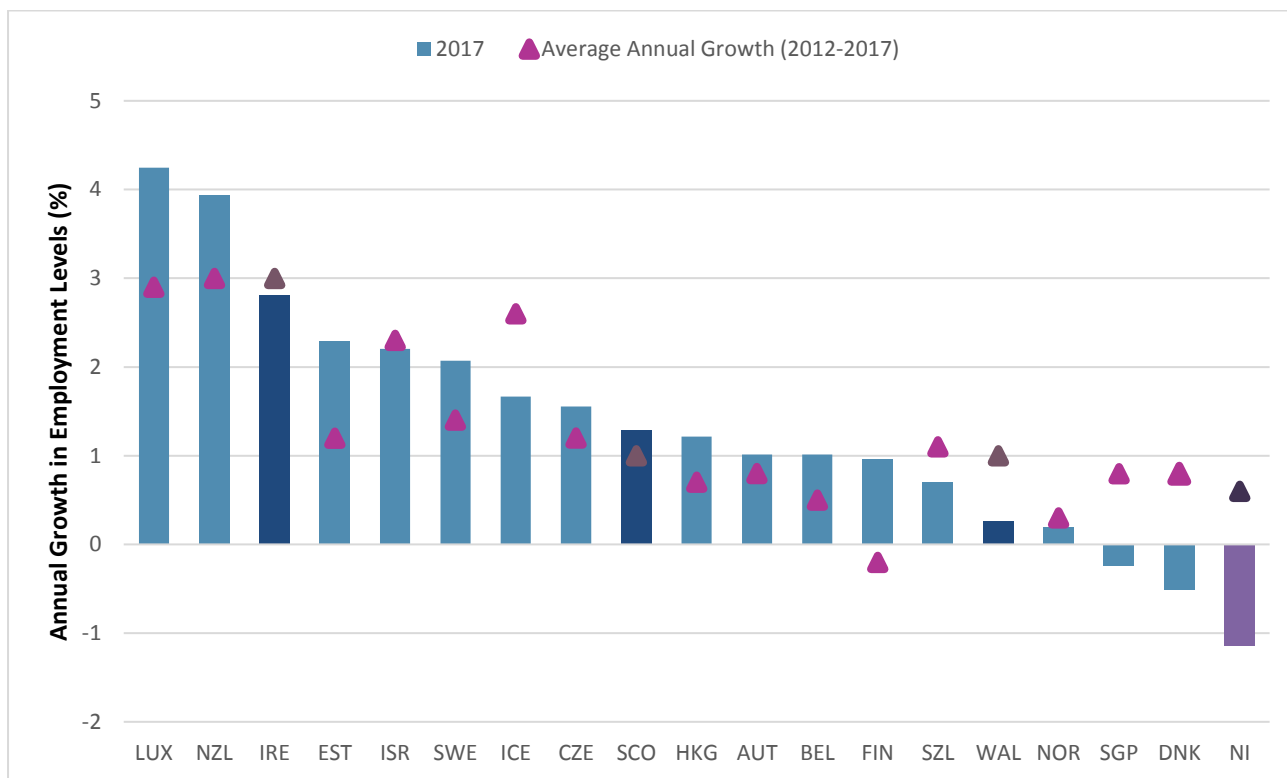
Whilst NI and almost all of the other SAEs analysed experienced a decline in the number of persons in employment during the height of the global recession in 2009, the fall was more pronounced for NI, with negative growth of -4.1% in 2009, compared with -1.9% for the SAE group average. Across the SAE group the severity of the impact on employment varies considerably. Estonia (-9.3%), Ireland (-8.5%) and Iceland (-6.4%) experienced a particularly harsh recession affected by sharp housing market downturns^{viii} whilst economies such as Luxembourg performed reasonably well, posting positive growth of 6.4%. This growth was supported by government policy decisions which aimed to maintain household purchasing power and reduce administrative burdens for businesses^{ix}.

Post-recession, the number of people in employment began to rise and NI bounced back with much higher growth compared to the SAE group average. This did not continue however, and subsequent to 2011, NI employment growth has generally been lower than the SAE group average.

As illustrated in Figure 1, this indicator fluctuates considerably each year across the SAEs and therefore should be considered with caution. For example across the SAE group NI's employment growth in 2014 ranked 6th, this position

decreased to 15th in 2015, bouncing back to 6th again in 2016. In order to get a complete picture of employment growth in an economy, further analysis looking at longer term growth in employment levels should be considered. For example, in NI, over the period 2004-2017, the number of people in employment increased by 11.4% compared with 6.2% across the SAE group.

Figure 2: Annual Employment Growth in Small Advanced Economies



Sources: ILO, ONS LFS

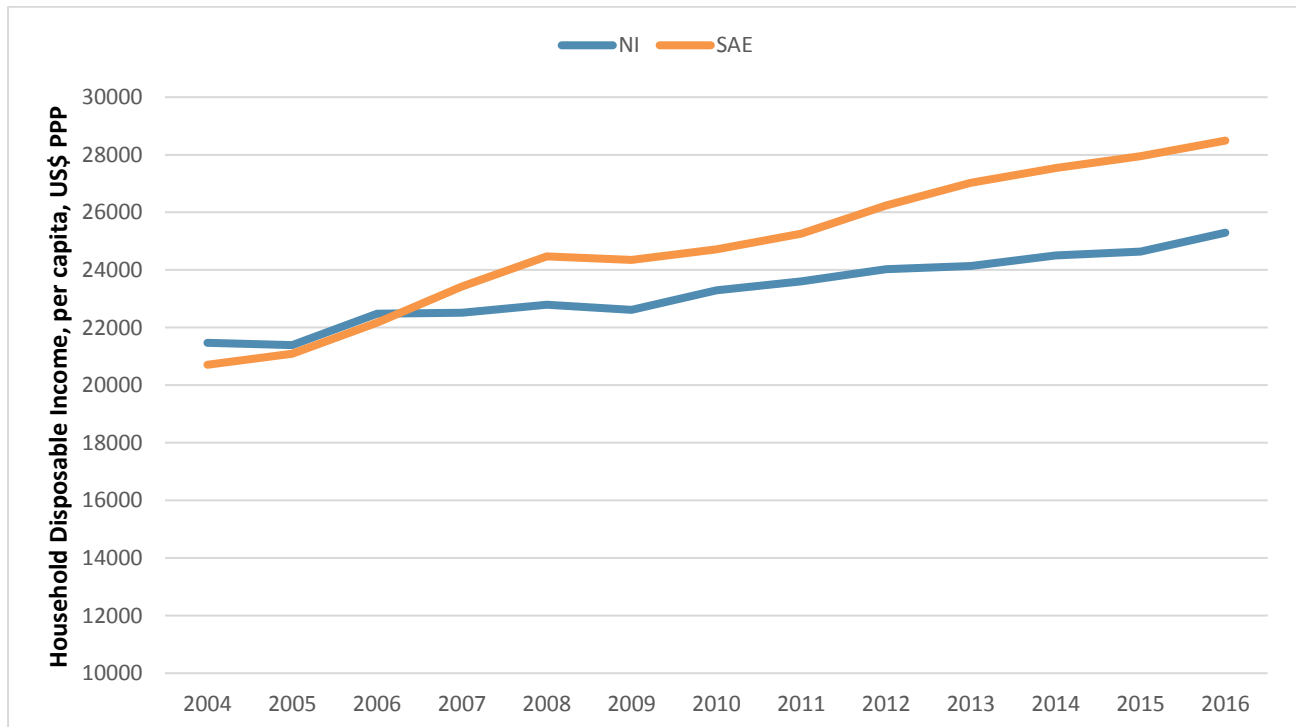
All economies analysed saw growth in employment levels during 2017 with the exception of NI, Denmark and Singapore (See Figure 2). Growth in NI at -1.1% was the weakest across the SAE group for this year. Whilst this is disappointing, the Northern Ireland Statistics and Research Agency (NISRA) report that these changes in employment are not statistically significant. Over the longer term there has been a significant increase in the number of persons in employment compared to 2009*.

Over the past five years, growth in the number of persons in employment has been relatively low across the SAE group with only five economies, New Zealand (3%), Ireland (3%), Luxembourg (2.9%), Israel (2.3%) and Iceland (2.6%) recording average annual growth above 2%. Ireland, which experienced a sharp fall in employment during the recession has bounced back significantly and in recent years have been leading performers on this indicator. This growth has been supported by high levels of Foreign Direct Investment and strong service exports^{xi}. Over this same period, NI has had growth of 0.6% similar to other economies such as Hong Kong (0.7%) and Belgium (0.5%).

Household Disposable Income

Household disposable income is the most widely used household income measure as it takes into account the amount of money a household has available for spending and saving after taxes and transfers have been accounted for^{xii}. Figure 3 shows a comparison of annual household disposable income per capita, between NI and the SAE group. In 2004, per capita, household disposable income in NI was slightly higher (4%) than the SAE group average, and whilst this rate decreased, NI continued to outperform the SAE group up to 2006. Post 2006, the SAEs average household disposable income per capita experienced an accelerated growth period and overtook NI in 2007. NI average household disposable income per capita has since been below the SAE group average and this gap has continued to widen, falling from 96% of the SAE group average in 2007 to 89% in 2016.

Figure 3: Annual Household Disposable Income, per capita 2004-2016^{xiii}



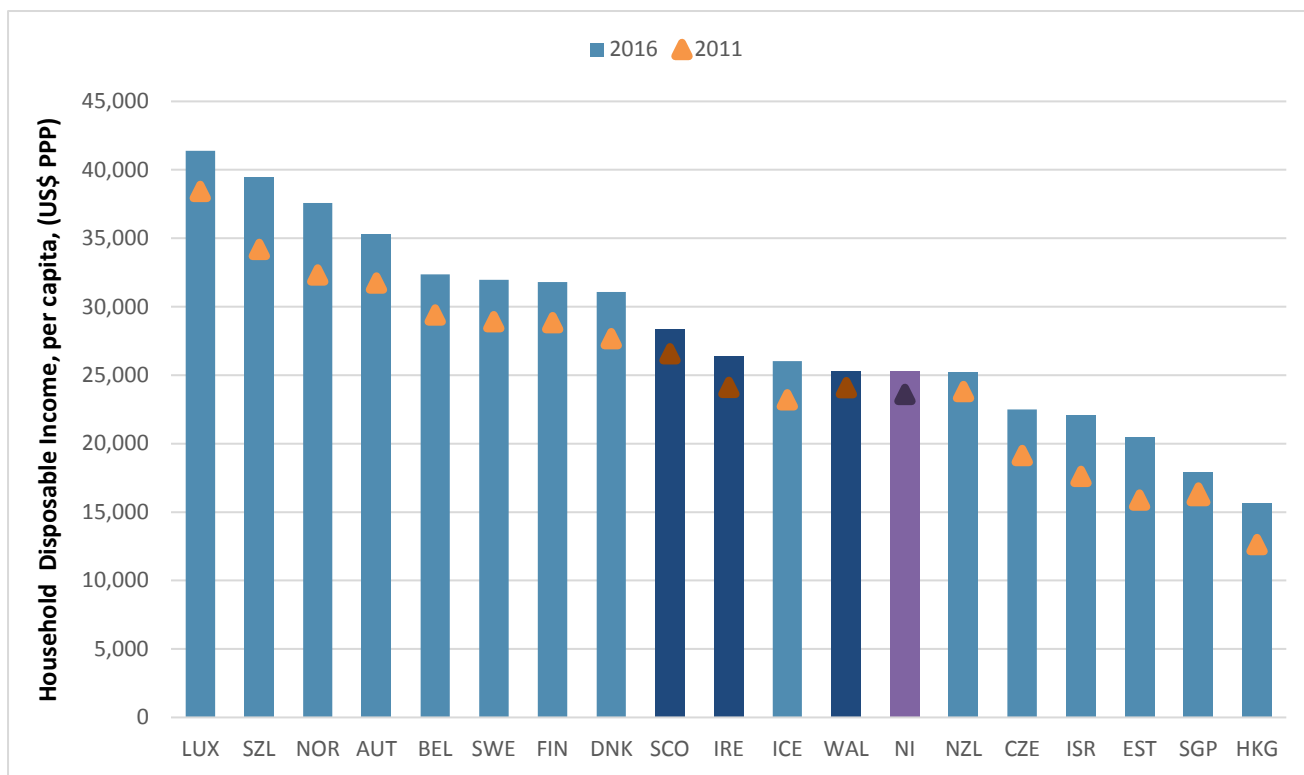
Sources: OECD, Gallup, Hong Kong Census & Statistics Department, Singapore Department of Statistics, ONS

Both NI and the SAE group experienced a fall in average household disposable income per capita during the recession, however the decline in 2009 for both NI (-0.8%) and the SAE group (-0.5%) was not substantial. During this time, households benefited from a combination of historically low base rates and automatic stabilizers that took place in Europe and the UK in order to stimulate, and offset fluctuations in domestic markets after the financial crisis^{xiv}.

Whilst noting that NI household disposable income per capita has fallen below the SAE group average from 2007, with the exception of 2009, the economy still saw an increase in household disposable income year-on-year, culminating in 2016 with a peak of \$25,295 (in US\$ PPP). Similarly, the SAE group reached a peak value of \$28,491 (in US\$ PPP) in 2016.

Despite falling below the SAE group average, Figure 4 demonstrates that NI positions (13th) reasonably well in 2016 relative to the SAE group, outperforming Hong Kong, Singapore, Estonia, Israel, Czech Republic and New Zealand.

Figure 4: Household Disposable Income per Capita in SAEs, 2016 vs 2011



Sources: OECD, Gallup, Singapore Department of Statistics, Hong Kong Census & Statistics Department, ONS

Across the SAE group, Luxembourg, Switzerland and Norway had the highest levels of household disposable income per capita in 2016. A number of factors which may explain the higher than average household disposable income in these economies include:

- **Norway** – The development of a significant oil and gas sector led to rapid economic growth. In addition, high welfare payments and heavily subsidised health care also aid incomes. Similarly, unemployment benefits are generous: allowing many people to claim around 60% of their previous salary for two years while they are looking for new work^{xv}.
- **Luxembourg** - Economic growth of 3.1% in 2016 supported by a sharp improvement in the net exports of services, particularly financial services, has resulted in an increase in disposable incomes.^{xvi}.
- **Switzerland** - High household disposable income in Switzerland may be explained by the low percentage of income tax and social security contributions paid by residents^{xvii}.

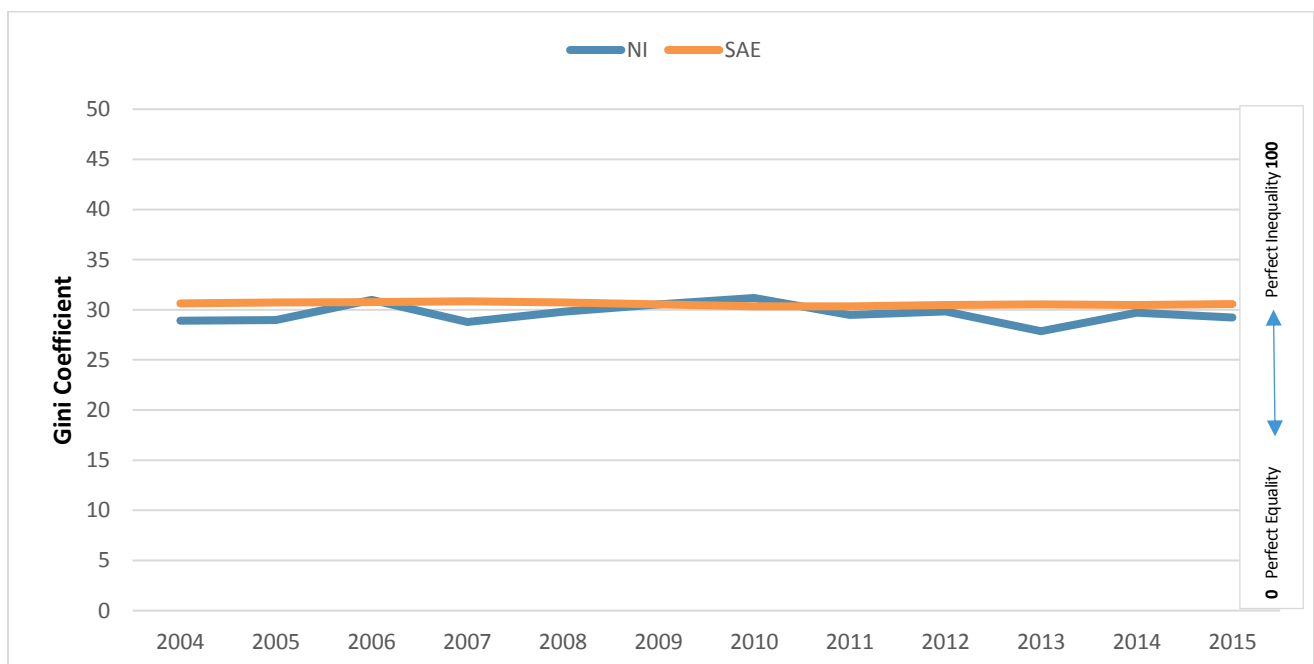
When comparing the year 2011 with 2016 we can see very little movement in household disposable income levels. Indeed, those economies which ranked 1st to 10th in 2011 held their positions in 2016. A similar trend is evident in NI, ranking thirteenth in both 2011 and 2016.

Across the SAE group, Hong Kong, Singapore, Estonia, Israel and Czech Republic all ranked within the bottom five economies on household disposable income per capita in 2016. Interestingly, when looking at the rate of growth from 2011-2016, these economies achieved the highest growth rates across the SAE group. This suggests that household disposable incomes per capita in those economies at the bottom of the distribution are increasing at a faster rate and therefore may catch-up and overtake those economies in the mid-range, including NI.

Income Inequality

Income inequality, measured by the Gini coefficient^{xviii}, highlights the distribution of different individuals' or households' disposable income in a particular year^{xix} - where a Gini coefficient of zero represents perfect equality and 100, perfect inequality. Over the period 2004-2015, both NI and the SAE group have had similar rates of income inequality with NI being slightly more equal (see Figure 5). However, the annual Gini coefficient score has shown very little movement over this time period, therefore highlighting that across the SAE group, including NI, there has been only small progress towards improving income inequality.

Figure 5: Annual Gini Coefficient Score, 2004-2015

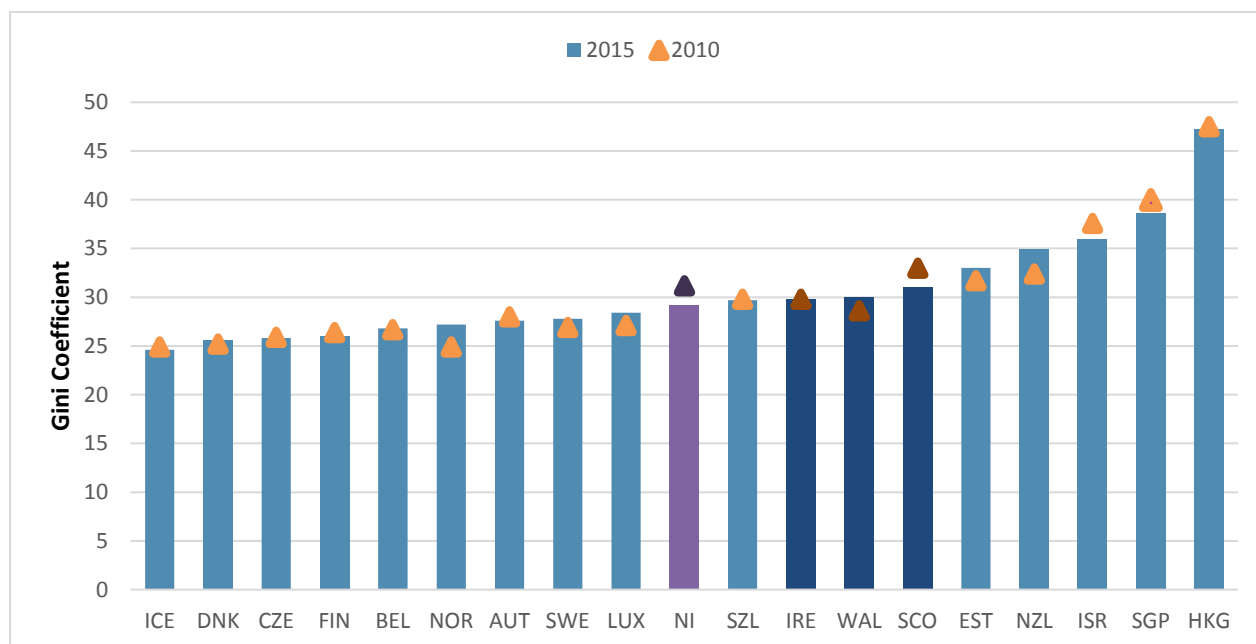


Sources: Northern Ireland Department for Communities, Hong Kong Census & Statistics Department, Institute of Fiscal Studies OECD, Scottish Government, Singapore Department of Statistics

Looking further at the SAE group (Figure 6), we can see that NI performs relatively well, ranking tenth in 2015 out of the 19 economies analysed. When comparing Gini coefficient scores in 2015 to those in 2010 it is found that there was almost no substantial difference in values, however, over half did experience a slight fall in the coefficient which infers less income inequality in an economy. Iceland, Denmark and Czech Republic had the lowest Gini coefficient in 2015 and therefore perform the best across the SAE group.

In 2010, Norway ranked joint first out of the 19 economies analysed for having the lowest Gini coefficient value of 24.9. Over the 5 year period, however, this value increased by the highest rate out of the SAE group, (2.3 points) meaning that income had become more unequally distributed, which resulted in Norway falling to sixth in 2015 out of the 19 economies analysed. Furthermore, New Zealand also experienced a relatively large increase, the second largest across the SAE group over the same time period. New Zealand ranks in the bottom five economies on this measure.

Figure 6: Income Inequality across SAEs, 2015 vs 2010



Sources: Northern Ireland Department for Communities, Hong Kong Census & Statistics Department, Institute of Fiscal Studies, OECD, Scottish Government, Singapore Department of Statistics

The Nordic economies perform relatively well in terms of income inequality, with Iceland, Denmark and Finland all ranking within the top five. These economies are characterised by comprehensive welfare systems, free education and healthcare^{xx}, alongside political and economic systems that preserves enterprise, economic autonomy and aspiration^{xxi}.

From Figure 6, an encouraging result can be observed in the decrease in inequality for NI over the period 2010 to 2015, where it experienced the second largest reduction in the Gini coefficient across the SAE group (1.96 points). This decrease can be attributed to higher earnings growth in NI, particularly at the lower end of the earnings distribution, and increases to the personal tax allowance^{xxii}. NI, therefore, on average has been more successful in curbing income inequality than many economies within the SAE group. Indeed, NI's Gini coefficient score has been consistently below the SAE group average in the years following 2010, thus representing less inequality.

Overall, NI performs relatively well on this measure. However, it is important to consider this measure alongside other measures of wealth, to ensure that a lower Gini coefficient comes from actual equality and not just lower overall wealth.

Conclusions

Northern Ireland’s position across each of the three measures discussed within this Research Bulletin Article varies (Table 1), however each indicates that in order to meet the draft Industrial Strategy’s target of being in the top three most competitive economies by 2030, improvement is needed. NI lags behind most other SAEs, ranking in the bottom five economies over the past five years in terms of employment growth. While it is encouraging that household disposable income in NI has been increasing, particular cause for concern is the fact that NI has been performing below the SAE group average and this gap has been widening in recent years. NI ranks relatively well against other SAEs on income inequality and NI’s Gini coefficient score has broadly been in line with the SAE group average.

Table 1: Northern Ireland Economic Rankings against Small Advanced Economies

Measure	Most Recent Position Rank	Five Year Rank
Employment Growth	19 th	16 th
Household Disposable Income	13 th	13 th
Income Inequality	10 th	13 th

The SAE group have been performing well, with data highlighting that Luxembourg performs strongly across employment growth and household disposable income and has seen improvements across income inequality. The economies with the lowest level of household disposable income per capita seen the largest increase over the previous five years, showing signs of economic convergence.

The indicators discussed in this Research Bulletin Article are important measures in order to gauge how well an economy is performing and how it is working for everyone. These indicators, along with those set out in Research Bulletin Article 18/1 (published in April 2018) draw a clearer picture of NI’s current position on competitiveness. However, in line with the pillars set out in the draft Industrial Strategy, DfE will continue to take forward and expand this benchmarking exercise to cover a wide range of variables that underpin competitiveness across these pillars.

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- ⁱ <https://www.economy-ni.gov.uk/sites/default/files/consultations/economy/industrial-strategy-ni-consultation-document.pdf>
- ⁱⁱ <http://eagni.com/wp-content/uploads/2015/06/Competitiveness-Index-for-Northern-Ireland-2013.pdf>
- ⁱⁱⁱ <http://eagni.com/wp-content/uploads/2016/08/EAG-Competitiveness-Summary-Report.pdf>
- ^{iv} <https://www.economy-ni.gov.uk/sites/default/files/publications/economy/Benchmarking-Northern-Ireland-against-Small-Advanced-Economies.pdf>
- ^v <https://www.economy-ni.gov.uk/sites/default/files/publications/economy/Research-Bulletin-18-1-International-Economic-Performance.pdf>
- ^{vi} Employment growth is measured by the number of persons in employment as opposed to the number of jobs, as some people may have more than one job. International Labour Organisation (ILO) employment data is used, which includes all persons of working age in employment who during a specified brief period, either one week or one day, were in either paid employment or self-employment.
https://www.ilo.org/ilostat/faces/oracle/webcenter/portalapp/pagehierarchy/Page27.jsp?indicator=EMP_TEMP_SEX_AGE_NB&subject=EMP&datasetCode=A&collectionCode=YI&_afrcs.ctrlstate=tc1iyobl4_57&_afrcs.afrLoop=2310064774727953&_afrcs.afrWindowMode=0&_afrcs.afrWindowId=tc1iyobl4_54#!
- ^{vii} <https://data.oecd.org/emp/employment-rate.htm>
- ^{viii} <http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=593>
- ^{ix} <https://igf.gouvernement.lu/dam-assets/fr/dossiers/programme-de-stabilite/C3%A9/eng/11th-update-stability-growth-programme.pdf>
- ^x <https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/LK75ii-labour-market-report-december-2017.PDF>
- ^{xi} <https://www.ft.com/content/06fe175e-d1c6-11e6-9341-7393bb2e1b51>
- ^{xii} <https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/bulletins/householddisposableincomeandinequality/financialyearending2017>
- ^{xiii} Applying nominal exchange rates would overestimate the disposable income of countries with high price levels relative to countries with low price levels. Therefore to account for these issues, Purchasing Power Parities (PPPs) are used to reflect price level differences across countries. The use of PPPs ensures that the adjusted disposable income of all countries is valued at a uniform price level and thus reflects only differences in the actual volume of the economy therefore eliminating the effect of price level differences across countries.
- ^{xiv} <http://www.oecd.org/economy/household-disposable-income-has-outpaced-gdp-growth-for-the-oecd-area-since-2007.htm>
http://webarchive.nationalarchives.gov.uk/20160113233720/http://www.ons.gov.uk/ons/dcp171766_240249.pdf
- ^{xv} <http://www.bbc.com/capital/story/20180709-unlike-most-millennials-norways-are-rich>
- ^{xvi} https://ec.europa.eu/info/sites/info/files/wf2017_luxembourg.pdf
- ^{xvii} <http://www.oecd.org/switzerland/taxing-wages-switzerland.pdf>
- ^{xviii} The Gini Coefficient measures the extent to which the distribution of income among individuals or households within an economy deviates from a perfectly equal distribution. The Gini index measures the area between the Lorenz curve and the hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. A Gini index of zero represents perfect equality and 100, perfect inequality. <https://stats.oecd.org/glossary/detail.asp?ID=4842>
- ^{xix} <https://data.oecd.org/inequality/income-inequality.htm>
- ^{xx} <https://pursuit.unimelb.edu.au/articles/why-nordic-countries-top-the-happiness-league>
- ^{xxi} <https://theconversation.com/what-the-world-can-learn-about-equality-from-the-nordic-model-99797>
- ^{xxii} <https://www.irishnews.com/news/2017/08/18/news/income-inequality-narrows-in-northern-ireland-with-fall-in-number-of-pensioners-and-children-living-in-poverty-but-parents-f-1113785/>