# Nordic Lessons from Exchange Rate Regimes

Gylfi Zoega
Department of Economics
University of Iceland
107 Reykjavik
Iceland

83rd International Atlantic Economic Conference
22-25 March 2017
Kempinski Bristol Hotel
Berlin

The Nordic countries of Denmark, Finland and Sweden share cultural, historical and institutional features but differ in terms of membership of international organizations and currency arrangements:

EU: Denmark, Finland, Sweden (Norway and Iceland in EEA)

NATO: Denmark, Iceland, Norway

Denmark: Fixed exchange rates

Finland: Euro

Sweden: Floating exchange rates

A comparison of the macroeconomic performance of these countries can reveal more about the benefits of different currency regimes than a comparison between countries that differ widely in other dimensions.

The following table compares some institutional features for 31 OECD countries using data from the Heritage Foundation.

It shows the similarity of the Nordic countries.

The troubled euro zone countries tend to have “bad” institutions – rigid labor and product markets and poor protection of property rights – incentives for rent seeking instead of productive activities.

The table measures property rights, fiscal health, product and labor market regulations, price stability, efficiency of the financial system and the tax burden.

**Table 1.** Index of economic freedom (2017)

| | Ranking | | Property rights | | | Fiscal | Regulations | | Money and finance | | Taxes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Country Name** | **World Rank** | **Region Rank** | **Property Rights** | **Judical Effect.** | **Gov. Integrity** | **Fiscal Health** | **Business Freedom** | **Labor Freedom** | **Monetary Freedom** | **Financial Freedom** | **Tax Burden % of GDP** |
| Australia | 5 | 4 | 81.7 | 92.9 | 74.8 | 84.6 | 89.3 | 84.1 | 86.4 | 90 | 27.5 |
| Austria | 30 | 17 | 86.0 | 81.8 | 75.2 | 79.7 | 76.9 | 67.6 | 83.4 | 70 | 43.0 |
| Belgium | 49 | 25 | 83.3 | 69.3 | 71.5 | 66.3 | 82.0 | 61.1 | 84.9 | 70 | 44.7 |
| Canada | 7 | 1 | 88.3 | 80.8 | 81.6 | 66.3 | 81.9 | 73.1 | 77.8 | 80 | 30.8 |
| Chile | 10 | 4 | 68.2 | 63.7 | 70.5 | 66.3 | 72.3 | 64.3 | 82.2 | 70 | 19.8 |
| Czech Rep. | 28 | 16 | 70.3 | 55.9 | 55.9 | 66.3 | 67.2 | 77.7 | 85.8 | 80 | 33.5 |
| **Denmark** | **18** | **9** | **86.7** | **68.5** | **84.9** | 66.3 | **93.9** | **85.8** | **85.5** | **80** | **50.9** |
| Estonia | 6 | 2 | 82.6 | 82.8 | 69.9 | 66.3 | 77.0 | 56.9 | 85.7 | 80 | 32.9 |
| **Finland** | **24** | **13** | **90.6** | **82.7** | **90.0** | 66.3 | **90.2** | **53.4** | **85.1** | **80** | **43.9** |
| France | 72 | 32 | 85.0 | 72.7 | 69.7 | 66.3 | 78.0 | 44.1 | 81.6 | 70 | 45.2 |
| Germany | 26 | 15 | 82.9 | 79.5 | 77.7 | 66.3 | 86.6 | 42.8 | 85.9 | 70 | 36.1 |
| Greece | 127 | 43 | 52.5 | 56.1 | 41.3 | 66.3 | 74.3 | 51.0 | 78.2 | 40 | 35.9 |
| Hungary | 56 | 27 | 60.1 | 51.8 | 41.5 | 66.3 | 64.0 | 64.4 | 91.7 | 70 | 38.5 |
| **Iceland** | **22** | **12** | **85.0** | **71.5** | **71.5** | 66.3 | **90.2** | **62.6** | **81.2** | **60** | **38.7** |
| Ireland | 9 | 3 | 85.8 | 78.3 | 78.3 | 66.3 | 80.3 | 73.6 | 87.6 | 70 | 29.9 |
| Italy | 79 | 34 | 74.6 | 55.4 | 44.7 | 66.3 | 69.8 | 52.9 | 86.9 | 50 | 43.6 |
| Japan | 40 | 10 | 89.4 | 73.8 | 86.1 | 66.3 | 82.3 | 77.5 | 83.0 | 60 | 30.3 |
| Latvia | 20 | 11 | 72.6 | 59.7 | 67.3 | 66.3 | 79.8 | 72.0 | 86.5 | 60 | 27.8 |
| Lithuania | 16 | 8 | 73.0 | 62.4 | 69.7 | 66.3 | 79.1 | 63.6 | 90.0 | 70 | 29.3 |
| Netherlands | 15 | 7 | 87.4 | 69.9 | 85.7 | 66.3 | 80.2 | 70.5 | 85.8 | 80 | 36.7 |
| New Zealand | 3 | 3 | 96.1 | 88.5 | 89.9 | 66.3 | 91.8 | 86.2 | 90.1 | 80 | 32.4 |
| **Norway** | **25** | **14** | **86.7** | **83.3** | **88.3** | 66.3 | **89.5** | **48.8** | **75.8** | **60** | **39.1** |
| Poland | 45 | 21 | 60.8 | 58.0 | 55.5 | 66.3 | 67.8 | 61.5 | 84.7 | 70 | 31.9 |
| Portugal | 77 | 33 | 73.3 | 68.9 | 59.0 | 66.3 | 86.4 | 43.4 | 85.9 | 60 | 34.4 |
| Slovak Rep. | 57 | 28 | 69.0 | 38.0 | 39.6 | 66.3 | 64.9 | 54.4 | 81.1 | 70 | 31.0 |
| Slovenia | 97 | 38 | 75.0 | 55.1 | 53.6 | 66.3 | 80.6 | 60.2 | 85.3 | 50 | 36.6 |
| Spain | 69 | 31 | 71.2 | 53.9 | 57.2 | 66.3 | 66.9 | 55.3 | 85.5 | 70 | 33.2 |
| **Sweden** | **19** | **10** | **88.6** | **82.2** | **87.4** | 66.3 | **90.8** | **53.2** | **85.3** | **80** | **42.7** |
| Switzerland | 4 | 1 | 86.9 | 77.6 | 80.3 | 66.3 | 76.8 | 72.2 | 84.4 | 90 | 27.1 |
| United Kingdor | 12 | 4 | 93.8 | 93.0 | 78.3 | 66.3 | 89.9 | 72.8 | 85.0 | 80 | 32.6 |
| United States | 17 | 2 | 81.3 | 75.1 | 78.1 | 66.3 | 84.4 | 91.0 | 80.1 | 70 | 26.0 |

# Monetary policy regimes

Denmark
Fixed exchange rates vis-á-vis the euro, ERM2, fixed exchange rates since 1982, fluctuation band of +/- 2.25 percent.

Sweden
Floating exchange rate regime. Interest rates are set by a committee with the objective of maintaining price stability, understood to mean an inflation rate around 2 per cent per year.

Finland
Member of the  Eurozone. The objective of the common monetary policy is to maintain price stability in the euro area, defined as having average inflation in the euro zone close to 2%.

**Figure 1.** Index of gross domestic product

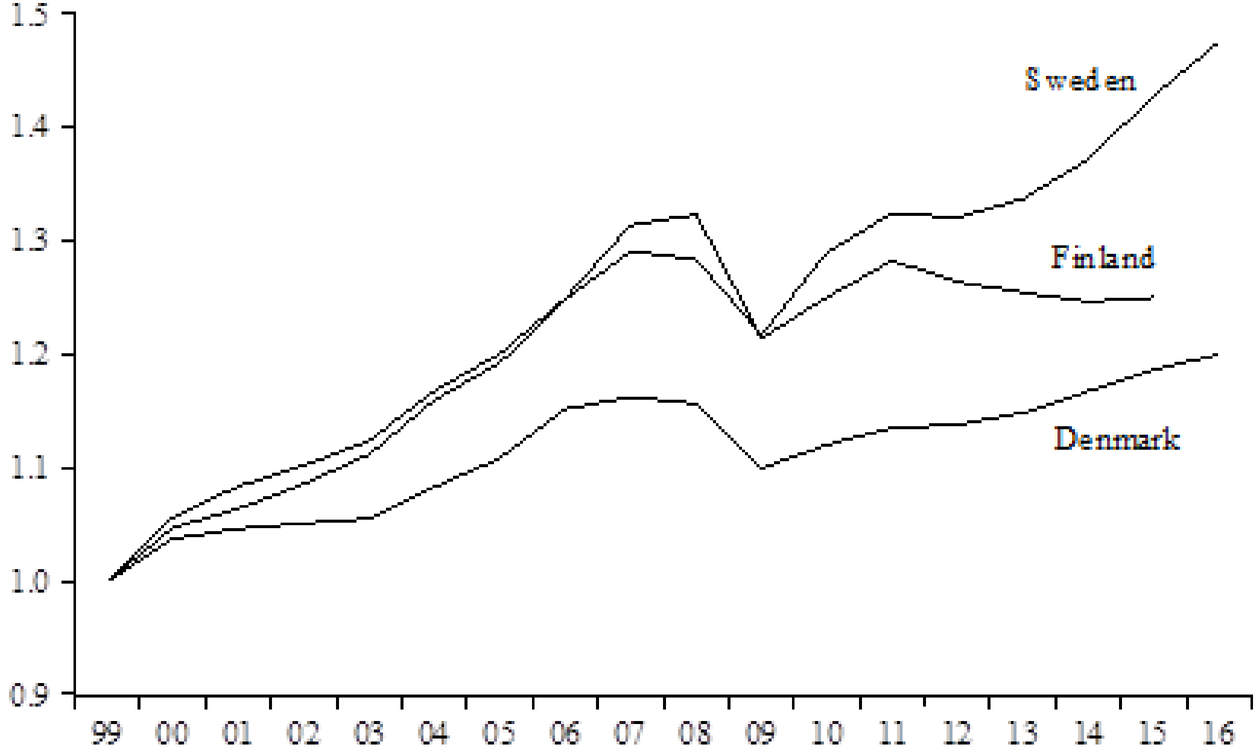
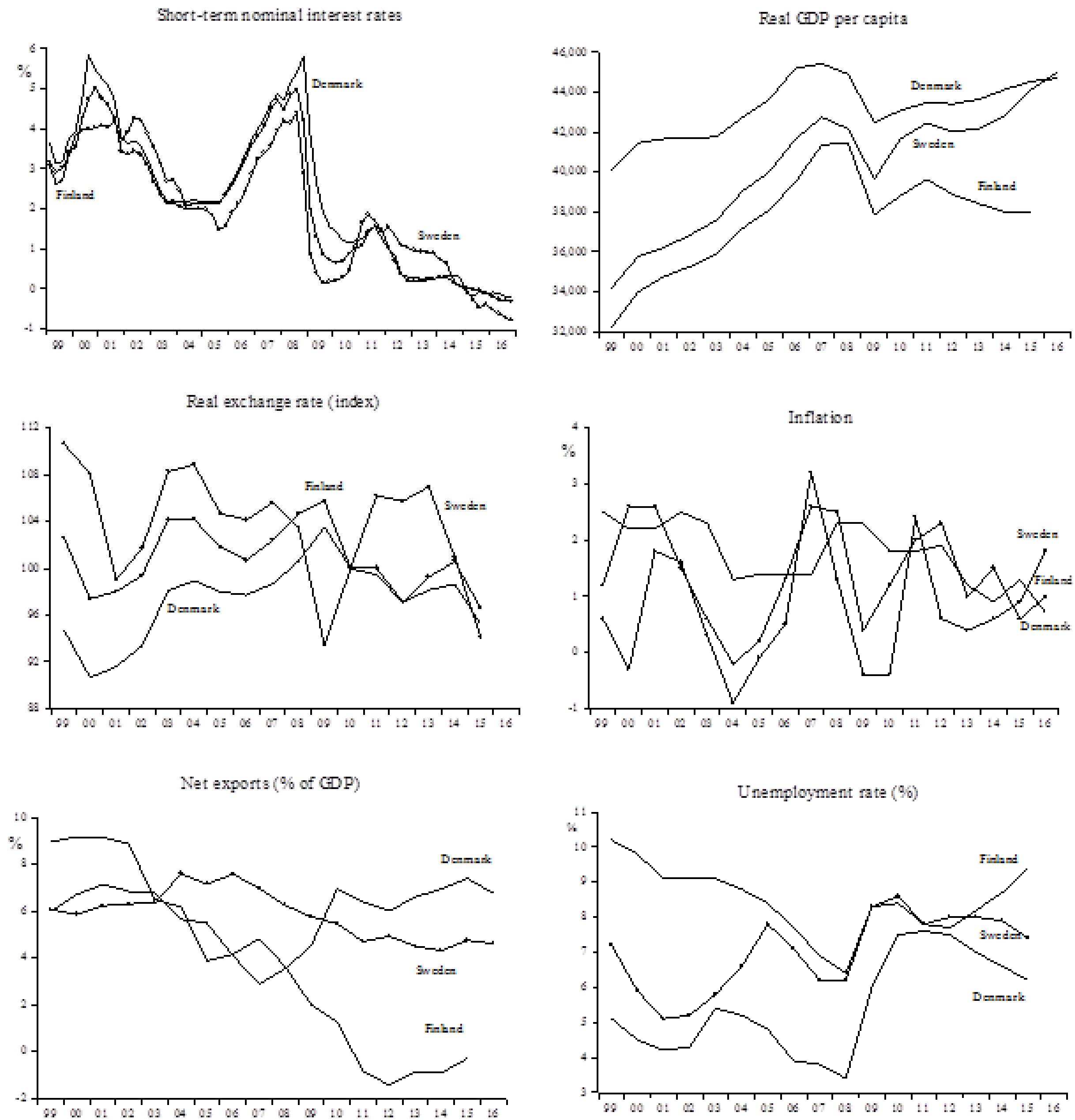


**Figure 2.** Denmark, Finland and Sweden



Short-term interest rates move together.

High growth in Sweden cannot be attributed to low real exchange rates and rising net exports.

None of the three countries does much better when it comes to inflation and unemployment.

# What can happen when interest rates diverge?

Meanwhile, the smallest country suffered from the consequences of high interest rates.  Iceland raised it interest rates gradually to 15.5% in 2008.

Capital inflows ended in a sudden stop. The inflow raised the exchange rate and stock prices. Economic boom, large current account deficits. Borrowing in foreign currencies to buy stocks, which then ended in bankruptcies and the collapse of the banking system.

Experience shows the perils of the combination of an independent monetary policy and capital mobility.

**Figure 3.** Iceland

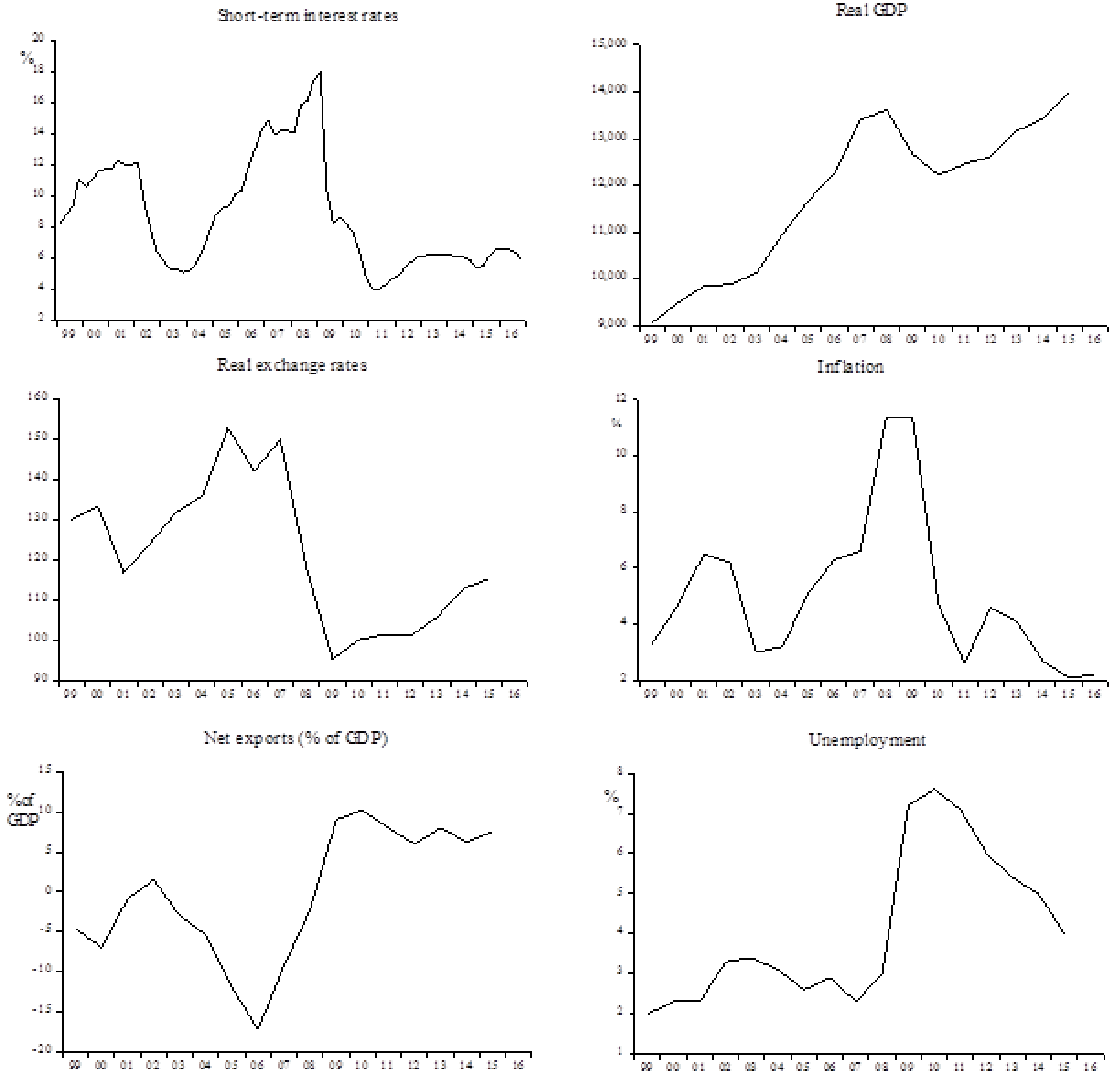


**Table 2.** Standard deviation, 1999-2015

| | Denmark | Finland | Sweden | Iceland |
|---|---|---|---|---|
| Real GDP per capita | 1481.23 | 2493.64 | 3102.61 | 3274.43 |
| Real exchange rate | 3.2897 | 2.78351 | 4.91077 | 17.8961 |
| Net exports (% of GDP) | 1.32909 | 3.90809 | 1.06111 | 8.20315 |
| Inflation (%) | 0.56174 | 0.88799 | 1.07419 | 2.74851 |
| Unemployment (%) | 1.39945 | 0.98346 | 1.10367 | 1.90620 |

# Summary

Denmark, Finland and Sweden have similar institutions and culture but differ in their monetary regimes.

Short-term interest rates in the three have been quite similar since 1999

The benefits of floating rates in Sweden are limited due to real exchange rate fluctuations and a high import content of output.

The fluctuations of output per capita have been greater in the floating exchange rate countries than in Denmark and Finland.

Overall, the macroeconomic performance of the three countries has been quite similar.

In contrast, interest rates in Iceland were allowed to diverge significantly from foreign interest rates in 2004-2008, which caused an inflow of capital, a sudden stop and a financial crisis.

Independent monetary policy requires a second tool such as a tax on hot money inflows.

# Conclusions

Countries with independent currencies have to choose between letting their interest rates follow foreign interest rates or setting up an instrument to make the carry trade more costly as described by Bob Aliber in his talk.

Floating exchange rates are thus not only shock absorbers for the real economy and a safety valve but in combination with capital mobility can be a source of economic fluctuation and financial turbulence.