

Bergh, Andreas

**Working Paper**

## The compensation hypothesis revisited and reversed

IFN Working Paper, No. 1273

**Provided in Cooperation with:**

Research Institute of Industrial Economics (IFN), Stockholm

*Suggested Citation:* Bergh, Andreas (2019) : The compensation hypothesis revisited and reversed, IFN Working Paper, No. 1273, Research Institute of Industrial Economics (IFN), Stockholm

This Version is available at:

<https://hdl.handle.net/10419/210913>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

IFN Working Paper No. 1273, 2019

# **The Compensation Hypothesis Revisited and Reversed**

Andreas Bergh

# The compensation hypothesis revisited and reversed

Andreas Bergh<sup>+</sup>

## Abstract

This note describes how research on the link between globalization and openness has changed over time. Early contributions assumed that countries develop welfare states to compensate for volatility caused by economic openness (the compensation hypothesis). Recent findings have cast doubts on several steps in the causal chain implied by the compensation hypothesis. In many ways economic openness has been shown to be particularly beneficial for countries with high taxes and high income equality. Countries with large welfare states can use economic openness to mitigate some of the unintended side-effects of social protection and high taxes. The compensation hypothesis can thus be reformulated: Through trade, the citizens in large welfare states can enjoy some of the benefits associated with cheap labor and high wage dispersion despite their domestic economy being characterized by the opposite.

**JEL Codes:** F10, H53, E02

**Keywords:** Economic integration, Welfare state, Globalization.

---

<sup>+</sup> Department of Economics, Lund University, Box 7082, SE-22007 Lund, Sweden; and Research Institute of Industrial Economics (IFN), P.O. Box 55665, 102 15 Stockholm, Sweden; email: [andreas.bergh@ifn.se](mailto:andreas.bergh@ifn.se). Financial support from the Swedish Research Council and Torsten Söderberg's Foundation is gratefully acknowledged.

## Background

The idea that open economies develop large welfare states or corporatist institutions as a response to the volatility caused by economic openness and international markets is known as the compensation hypothesis. In economics, the argument is often attributed to (Rodrik 1997, 1998), while the standard reference for political scientists is Katzenstein (1985). As noted by Garrett (2001) the idea was used before that by Ruggie (1982) to explain the growth of the American welfare state after the signing of the Bretton Woods agreement. The core idea can be traced back further, at least to Cameron (1978) and Lindbeck (1975).

As commonly used in the literature, the compensation hypothesis suggests the following causal chain:

- Economic globalization means that countries are increasingly exposed to international markets and affected by events in the rest of the world.
- Such exposure to international markets means that the domestic economic situation becomes more volatile.
- The volatility induced by openness leads to higher demands for security arrangements among voters in the exposed country.
- These demands lead open countries to expand security institutions such as unemployment insurance, labor market training programs and welfare state institutions in general.
- As a result, more open economies tend to have bigger public sectors.

If the hypothesis is correct the positive association between openness and government size should hold both between countries and within countries over time, allowing sufficient time for openness to affect public sector size via the political process. The support for that association is, however, fragile. Rodrik (1998) presented cross-country evidence using government consumption as a share of GDP and imports and exports relative to GDP. Alesina & Wacziarg (1998) argued that the positive correlation noted by Rodrik might be spurious if small countries (measured by population size) tend to have higher economic openness and larger government. They showed that controlling for country size rendered the link between openness and government size less robust.

Ram (2009) revisited the question using panel data covering 154 countries over 41 years, and confirmed the association found by Rodrik when using country fixed effects, rejecting the role of country size as an omitted variable. More recent evidence suggest however that results differ substantially depending on the data source used. Jetter & Parmeter (2015) found that smaller countries do have bigger governments, and that the findings by Ram (2009) might be driven by the specific dataset used (PWT 6.1). They also showed that results are sensitive to the timeframe and the country sample considered. The conclusion that the positive association is not robust is also strengthened by Garrett's (2001) findings that the positive correlation between openness and spending holds for levels, but not for changes over time as it should according to the hypothesis.

As expected when an association turns out to be sensitive to the choice of timeframe, country sample and estimation method, several contributions have explored different types of heterogeneity in the association. For example, Nooruddin & Simmons (2009) argue that democracies respond to increases in openness by increasing spending while dictatorships respond by decreasing spending. Leibrecht, Klien, & Onaran (2011) find evidence of the compensation hypothesis in Western Europe which is driven by countries with the conservative welfare regime (according to the standard classification of Esping-Andersen, 1990).<sup>1</sup> In summary, there is no systematic and robust link (within or between countries) between openness and government size.

The fragility of the fundamental association upon which the compensation hypothesis rests is less surprising considering that most steps in the causal chain have been examined and shown to be wrong.

First, it is true that globalization, and in particular economic openness world wide, has been increasing for several decades (see e.g. Dreher, Gaston, & Martens, 2008). It is not true, however, that economic openness necessarily means exposure to markets that induce volatility. As discussed by Down (2007), economic theory rather suggests that economic openness and international trade should give rise to risk diversification, promoting rather than reducing stability. The openness-volatility link is questioned on similar theoretical

---

<sup>1</sup> See also Benarroch & Pandey (2012) who argue that causality tests provide little or no support for a causal relationship between openness and aggregate or disaggregated government expenditure.

grounds also by Kim (2007). Before that, Iversen (2001) noted that in the post-war period, output volatility appears to have been lower in the more open OECD economies compared to less open economies. Both Down (2007) and Kim (2007) present empirical evidence against the link between openness and volatility, demonstrating that more open economies are in fact not more volatile. Kim analyzes 175 countries over the period 1950 to 2002 and find no significant effect of openness on domestic volatility. Down presents similar findings for a smaller set of countries and goes further by noting that trade integration may have eased rather than accentuated domestic economic volatility.<sup>2</sup>

Another link in the compensation hypothesis is examined by Shelton (2007) who showed that the expenditure associated with increased trade openness is largely not in categories that insure for risk, suggesting that even in samples where the expected correlation between government size and openness is found, the explanation provided by the compensation hypothesis is not the correct one.<sup>3</sup> This finding also rules out the possibility that policy makers or voters perceive economic openness to be associated with volatility, and that such perceptions (regardless of whether they are correct or not) are sufficient to explain political choices.

Further evidence against the compensation hypothesis is found in Dallinger (2013, 2014) who shows that the more open the economy of a country, the lower is the social security demands of its citizens. The sign of that correlation is the opposite of what it should be according to the compensation hypothesis. In general, if openness does not lead to higher volatility, there is no reason to expect that globalization unambiguously affects voter's preferences in one direction. As discussed by Walter (2010), globalization creates both winners and losers, and these groups should differ with regard to their social policy preferences. In summary, the idea that more open economies need or choose to develop bigger welfare states to compensate for volatility induced by global markets, is not supported by data.

---

<sup>2</sup> The link between openness and volatility is also quickly dismissed on empirical grounds by Alesina & Glaeser (2005).

<sup>3</sup> See also Meinhard & Potrafke (2012) who found a positive association between globalization and a size of government measure by the Penn World Tables that does not include social expenditures using panel data for 186 countries over the period 1970–2004.

## **A new compensation hypothesis?**

Even though the positive association between openness and government size is not robust, it should be acknowledged that empirical evidence has in general been kinder to the compensation hypothesis compared to the efficiency hypothesis (also known as the disciplining hypothesis or the race to the bottom hypothesis). According to the latter, economic globalization will force countries to lower taxes and benefits to attract capital and avoid attracting those who are likely to cost more than they contribute to the welfare state (Schulze and Ursprung 1999; Sinn 1997, 2003). There is very little evidence for such a 'race to the bottom'. In addition to the evidence regarding the openness-government size link cited above, see also the survey by Potrafke (2015) suggesting that globalization is not associated with lower overall tax revenue, and the study of developed welfare states by Brady, Seeleib-Kaiser, and Beckfield (2005) that concluded that globalization effects are far smaller than the effects of domestic political and economic factors and that globalization does not clearly cause welfare state expansion, reduction or convergence.

The fact that many countries combine large welfare states with high levels of economic openness thus still needs to be explained. As it turns out, a re-interpretation of the compensation hypothesis is motivated. Trade and openness creates greater opportunities for division of labor, enabling not only access to new products, but also to knowledge, technologies, and larger markets. A number of relatively recent findings suggest that economic openness is especially useful for countries with large welfare states, high wages and low inequality.

Iversen (2005) proposes a theory about welfare states that potentially explains why globalization and large welfare states often co-exist:

*"[...] labor-intensive, low-productivity jobs do not thrive in the context of high social protection and intensive labor-market regulation, and without international trade countries cannot specialize in high value-added services. Lack of international trade and competition, therefore, not the growth of these, is the cause of current employment problems in high-protection countries." [p. 74]*

Iversen's observation suggests a new compensation hypothesis, according to which the negative side-effects of high transfers and extensive labor-market regulations can be

compensated by economic openness, because trade allows welfare states to specialize in high value-added services.

Such a “new compensation hypothesis” is supported by the findings in Epifani & Gancia (2009) who showed that countries with large welfare states benefit from globalization via a terms of trade mechanism. More specifically, the social security arrangements in large welfare states increase production costs due to high wages, high taxes and regulations that are costly for firms. These production costs, however, can be passed on to consumers globally. To do so, exporting firms in countries with high levels of social protection take advantage of the fact that they are not selling on perfectly competitive markets. They use their market power to increase prices, increasing revenue and remaining profitable despite operating in countries with high levels of social protection. In effect the high production costs in rich welfare states are shifted to consumers globally.

Countries with large welfare states also benefit from import, which enables their citizens to consume products at low prices because they are imported from countries where wages and taxes are lower, and business regulations are fewer. As shown by Fajgelbaum & Khandelwal (2016) the effect of trade on domestic prices is pro-poor because low-income earners spend relatively more on traded goods, whereas high-income earners consume relatively more services. That difference between the consumption baskets of high- and low-income is well-known at least since Deaton & Muellbauer (1980).

In countries with high taxes, high average wages and low wage dispersion, services will be relatively expensive (or available only in the shadow economy). Thus, economic openness will in a concrete way at least partly compensate consumers for high prices in the service sector by providing access to imported goods at low prices.

The compensation hypothesis can thus be reformulated: Through trade, the citizens in large welfare states can enjoy some of the benefits associated with cheap labor and high wage dispersion despite their domestic economy being characterized by the opposite.



## References

- Alesina, Alberto and Edward Glaeser. 2005. *Fighting Poverty in the US and Europe : A World of Difference*. Oxford: Oxford University Press.
- Alesina, Alberto and Romain Wacziarg. 1998. "Openness, Country Size and Government." *Journal of Public Economics* 69(3):305–21.
- Benarroch, Michael and Manish Pandey. 2012. "The Relationship between Trade Openness and Government Size: Does Disaggregating Government Expenditure Matter?" *Journal of Macroeconomics* 34(1):239–52.
- Cameron, David R. 1978. "The Expansion of the Public Economy: A Comparative Analysis." *American Political Science Review* 72(4):1243–61.
- Cameron, David. 2006. "David R. Cameron. 1978. "The Expansion of the Public Economy: A Comparative Analysis." *American Political Science Review* 72 (December): 1243-61." *American Political Science Review* 100(4):677-78.
- Dallinger, U. 2013. "Economic Openness and Domestic Demand for Social Protection: A Multi-Level Analysis of Social Security Preferences between 1990 and 2006." *Comparative Sociology* 12(5):585–616.
- Dallinger, U. 2014. "Globalization and Demand for Social Security: A Critical Examination of the Domestic Demand Approach." *Berliner Journal fur Soziologie* 24(1):59–88.
- Deaton, Angus and John Muellbauer. 1980. "An Almost Ideal Demand System." *American Economic Review* 70(3):312–26.
- Down, I. 2007. "Trade Openness, Country Size and Economic Volatility: The Compensation Hypothesis Revisited." *Business and Politics* 9(2):1–20.
- Dreher, Axel, Noel Gaston, and Pim Martens. 2008. *Measuring Globalisation: Gauging Its Consequences*. Springer.
- Epifani, Paolo and Gino Gancia. 2009. "Openness, Government Size and the Terms of Trade." *Review of Economics Studies* 76(2):629–668.
- Esping-Andersen, Gösta. 1990. *The Three Worlds of Welfare Capitalism*. Princeton: Princeton University Press.
- Fajgelbaum, Pablo D. and Amit K. Khandelwal. 2016. "Measuring the Unequal Gains from Trade." *The Quarterly Journal of Economics* 131(3):1113–80. Retrieved January 16, 2018 (<https://academic.oup.com/qje/article-lookup/doi/10.1093/qje/qjw013>).
- Garrett, Geoffrey. 2001. "Globalization and Government Spending around the World." *Studies in Comparative International Development* 35(4):3–29.
- Iversen, T. 2001. *The New Politics of the Welfare State*. Oxford University Press.
- Iversen, T. 2005. *Capitalism, Democracy and Welfare*. USA: Cambridge University Press.

- Jetter, Michael and Christopher F. Parmeter. 2015. "Trade Openness and Bigger Governments: The Role of Country Size Revisited." *European Journal of Political Economy* 37:49–63. Retrieved (<http://dx.doi.org/10.1016/j.ejpoleco.2014.11.001>).
- Katzenstein, Peter J. 1985. *Small States in World Markets: Industrial Policy in Europe*. Ithaca, N.Y.: Cornell University Press.
- Katzenstein, Peter J. 2003. "Small States and Small States Revisited." *New Political Economy* 8(1):9-30.
- Kim, So Young. 2007. "Openness, External Risk, and Volatility: Implications for the Compensation Hypothesis." *International Organization* 61(1):181.
- Leibrecht, M., M. Klien, and O. Onaran. 2011. "Globalization, Welfare Regimes and Social Protection Expenditures in Western and Eastern European Countries." *Public Choice* 148(3–4):569–94.
- Lindbeck, Assar. 1975. "Business Cycles, Politics, and International Economic Dependence." *Skandinaviska Enskildens Bank Quarterly Review* 2:53–68.
- Meinhard, S. and N. Potrafke. 2012. "The Globalization-Welfare State Nexus Reconsidered." *Review of International Economics* 20(2):271–87.
- Nooruddin, Irfan and Joel W. Simmons. 2009. "Openness, Uncertainty, and Social Spending: Implications for the Globalization- Welfare State Debate." *International Studies Quarterly* 53(3):841–66.
- Potrafke, Niklas. 2015. "The Evidence on Globalisation." *The World Economy* 38(3):509–52.
- Ram, Rati. 2009. "Openness, Country Size, and Government Size: Additional Evidence from a Large Cross-Country Panel." *Journal of Public Economics* 93(1–2):213–18.
- Rodrik, Dani. 1997. "Has Globalization Gone Too Far?" *Washington, DC: Institute for International Economics*.
- Rodrik, Dani. 1998. "Why Do More Open Economies Have Bigger Governments?" *The Journal of Political Economy* 106(5):997–1032.
- Ruggie, John Gerard. 1982. "International Regimes, Transactions, and Change: Embedded Liberalism in the Postwar Economic Order." *International Organization* 36(02):379.
- Schulze, Gunther G. and Heinrich W. Ursprung. 1999. "Globalisation of the Economy and the Nation State." *The World Economy* 22(3):295–352.
- Shelton, Cameron A. 2007. "The Size and Composition of Government Expenditure." *Journal of Public Economics* 91(11–12):2230–60.
- Sinn, Hans-Werner. 2003. *The New Systems Competition: A Construction Principle for Europe*. UK: Blackwell Publishers.
- Sinn, Hans Werner. 1997. "The Selection Principle and Market Failure in Systems Competition." *Journal of Public Economics* 66:247–74.

Walter, Stefanie. 2010. "Globalization and the Welfare State: Testing the Microfoundations of the Compensation Hypothesis." *International Studies Quarterly* 54(2):403–26.