

IATA ECONOMIC BRIEFING

MARCH 2014

IMPACT OF AIR TRAVEL TAX ON GERMAN ECONOMY

Summary and key points

- The Air Travel Tax has adverse impacts on the German economy and traveling public – it leads to a reduction in productive efficiency in the economy and suboptimal performance in the air transport sector.
- Reduced air connectivity may limit future business opportunities that would have been created through closer ties with emerging and liberalizing economies.
- Removing the tax will have immediate benefits of increasing industry contribution to GDP by EUR 1,226 million, additional 20 thousand jobs and travelers better off by EUR 1,552 million.

Air Travel Tax reduces production efficiency of the economy and creates adverse distortions

- Air transport is not an end product in itself but rather a derived demand that is an input to other economic activities and production processes. Large parts of the German economy depend on air transport as an input to business activity. A survey of German businesses by Ifo Institute found that over 70% of industrial, over 50% of service and over 40% of trading firms considered air transport to be either important or very important for their business. Taxes on intermediate inputs are a particularly distortive type of tax as they change the relative price of production components, which will lead to suboptimal production processes.¹
- Another form of distortion that can further contribute to production inefficiency as well as result in tax revenue losses can arise due to tax avoidance through “migration” or in this case through passengers using airports in neighboring countries. IATA has not undertaken its own assessment on this particular issue in Germany but airports close to the border have documented such developments since the introduction of the tax.
- The higher travel costs due to the tax reduce the demand for air transport services. The reduction in demand, combined with any substitution affects either geographic or otherwise, results in lower air connectivity and has likely led to a less efficient functioning of the air transport network. Chart 1 shows that Germany lags behind several of its peers in terms of air connectivity relative to the size of its GDP. Air transport is characterized by high fixed costs with several actors in the value chain, particularly airports and air navigation system providers, unable to vary their deployed capital in the short and medium term. Therefore, reduced demand has led to a decrease in capital utilization and overall suboptimal functioning of the air transport network in Germany.

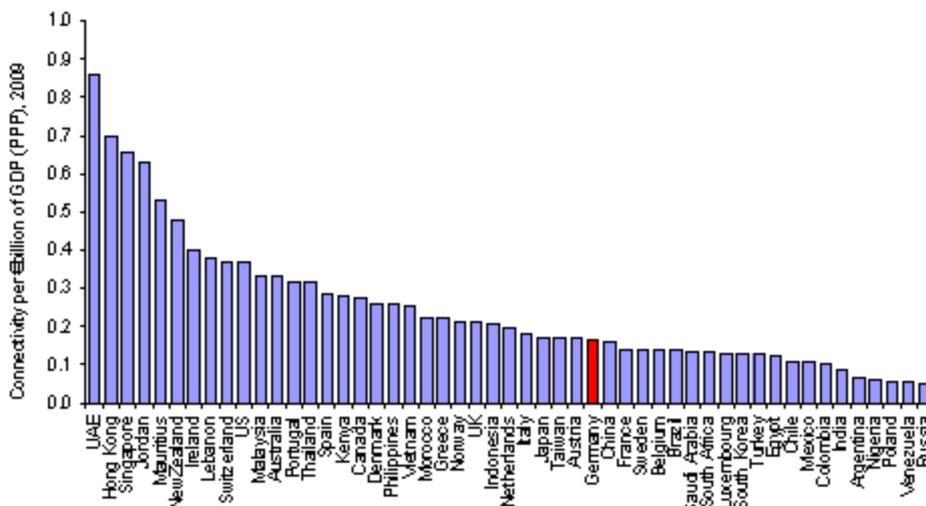


Chart 1. Source: IATA, IMF

¹ Diamond and Mirrlees, Optimal Taxation and Public Production, 1971.

Air Travel Tax can have long term negative consequences for the German economy

- An economy that appropriately balances short term and long term concerns is dynamically efficient. There are many approaches to measuring dynamic efficiency;² this assessment does not quantify the foregone benefits from reduced air transport links in attaining dynamic efficiency. Instead, it highlights the enabling role performed by air transport in better positioning countries to compete in a modern economy given emerging global trends.

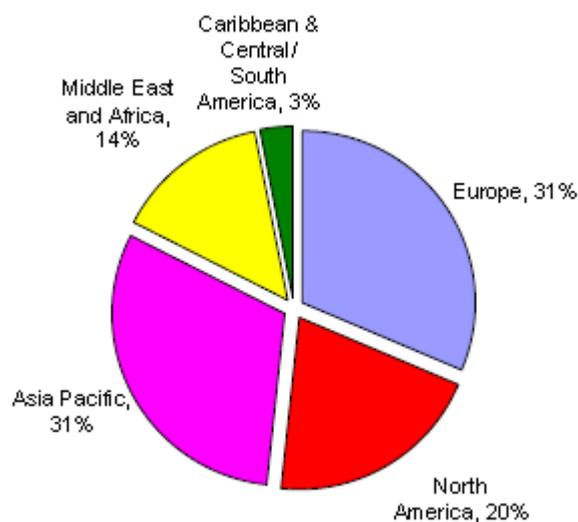


Chart 2. Source: IATA, Oxford Economics

- The next few years are likely to be particularly important for establishing business ties, especially in emerging and liberalizing economies. The presence of switching costs makes establishment of initial business ties a key consideration in the medium and long term. Reduced and more costly air connectivity can be a barrier to new opportunities. Business travel is essential for doing business internationally, especially for firms looking to reach new markets. A study on return on investment of business travel found that without face-to-face meetings a significant share of existing business would be lost and that in-person meetings are particularly important for recruiting new customers.³
- Chart 2 illustrates the regional distribution of German air freight tonnes. It shows that air freight carried to emerging economies makes up less than half of total air freight volume, raising the question of whether Germany is well connected to future growth from emerging and liberalizing economies.
- At present, there is built-up unspent corporate cash in an increasingly concentrated pool of global companies.⁴ Since 2008, the non-financial members of the S&P1200 - 975 of the world's biggest companies – had a total of USD 1.95 trillion in cash. By the end of 2012 that level jumped 62% to USD 3.2 trillion.⁵ Well connected, stable and resilient economies are well positioned to be recipients of some of these investments. With good infrastructure, appropriate incentives and low cost of access to and from Germany (if the tax is removed) can play to Germany's strengths in attracting business.

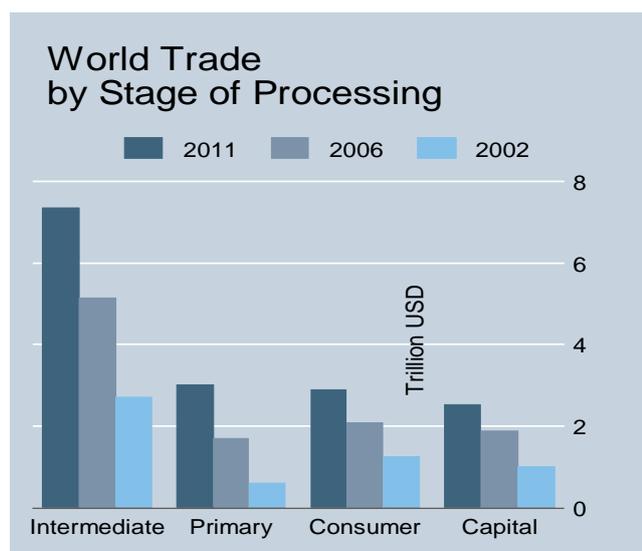


Chart 3. Source: UNCTAD

- Global trade is no longer driven by trade in finished products. An increasing share of global trade is intermediaries – threefold growth was observed over the ten year period up to 2011. When looking at trade flows based on stage of processing, intermediaries now make up about half of the global trade by value. The emergence of global value chains, as evidenced by the rise in intermediaries, has led to fractionalized and dispersed production that spans across national boundaries and even cross-regional geographies.⁶ Air connectivity plays a critical role in bringing inputs needed for production cost-effectively to Germany and taking high-value German outputs to other markets – thereby strengthening Germany's trade competitiveness.

² http://scholar.harvard.edu/files/mankiw/files/assessing_dynamic_efficiency.pdf

³ Oxford Economics, Return on Investment of US Business Travel, September 2009.

⁴ Financial Times, *Huge cash pile puts recovery in the hands of the view*, January 21, 2014.

⁵ Financial Times, *Pressure mounts for corporates' cash piles to be put to work*, January 21, 2014.

⁶ <http://www.oecd.org/trade/G20-Global-Value-Chains-2013.pdf>

- Strategically, tourists and connecting passengers to and from Germany play an important role in supporting the air transport system, which is used by German businesses to integrate in global value chains. Removing the tax will further strengthen the reach and frequency of the air transport network and allow for new opportunities to German businesses. Several studies have shown that increased air connectivity will raise the level of long run productivity in the economy.⁷

Immediate impact from removing the Air Travel Tax applied to international air travel

- Removing the Air Travel Tax will increase demand for air transport and will positively impact the airline and airport operations serving the German market. This impact will also ripple out through the broader economy along the air transport supply chain, through the tourism sector and via increased wage spending from industry employees on goods and services they consume privately.
- Table 1 summarizes the immediate annual impacts of removing the Air Travel Tax.⁸ The approach used is the same as the one detailed in the IATA briefing from August 2010⁹ but has been updated to reflect the changes in the tax structure and latest findings from the Oxford Economics study on the Economic Benefits from Air Transport in Germany.¹⁰ The increase in air connectivity will also have favorable impacts on freight services but these impacts are not quantified in this assessment.

Impact from removing the Air Travel Tax on international air travel

Avg. return international airfare and estimated fuel surcharge, EUR	456
Avg. ATT, EUR	13
Total travel cost, EUR	469
Decrease in travel cost by air, %	2.8%
Elasticity of demand	-1.05
Increase in international passenger traffic, %	3.0%
Annual increase in international passenger traffic, thousands	3,878
Increase in GDP (annual), EUR mil	1,226
Additional employment, jobs thousands	19.8
Annual benefits to travelers (consumers)¹¹, EUR mil	1,552

Table 1. Source: Input-Output model built for IATA by Oxford Economics.

⁷ Studies suggest that a 10% increase in connectivity (relative to GDP) will raise the level of long run productivity in the economy by 0.07-0.5% (Oxford Economics on behalf EUROCONTROL 2005, Oxford Economics 2006; InterVISTAS Consulting Inc. 2006).

⁸ Estimating GDP benefits using the input-output tables assumes a 'counterfactual' economy with unemployed resources, so all jobs and GDP created by tax abolition on international air travel are additional and do not crowd out existing employment. We consider this to be reasonable given OECD estimates of a GDP output gap of 0.8% in 2013 and continued, but narrowing, gap in 2014.

<http://stats.oecd.org/index.aspx?queryid=48222>

⁹ <http://www.iata.org/whatwedo/Documents/economics/German-passenger-tax-August-2010.pdf>

¹⁰ <http://www.benefitsofaviation.aero/Documents/Benefits-of-Aviation-Germany-2011.pdf>

¹¹ The input-output model of Oxford Economics estimates the consumer benefits by quantifying the benefits that accrue to each travel segment separately. An alternative approach, that does not assess consumer benefits separately by travel segment, estimates the impact on consumer benefits from removing the tax at an annual additional benefit to consumers of EUR 879 million.