

A Service of

ZBW

Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Wagner, Joachim

Working Paper A note on quality of a firm's exports and distance to destination countries: First evidence from Germany

Working Paper Series in Economics, No. 302

Provided in Cooperation with: Institute of Economics, Leuphana Universität Lüneburg

Suggested Citation: Wagner, Joachim (2014) : A note on quality of a firm's exports and distance to destination countries: First evidence from Germany, Working Paper Series in Economics, No. 302, Leuphana Universität Lüneburg, Institut für Volkswirtschaftslehre, Lüneburg

This Version is available at: https://hdl.handle.net/10419/102686

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.



WWW.ECONSTOR.EU

A note on quality of a firm's exports and distance to destination countries: First evidence from Germany

PAPE **NGRKING**

by Joachim Wagner

University of Lüneburg Working Paper Series in Economics

No. 302

July 2014

www.leuphana.de/institute/ivwl/publikationen/working-papers.html

ISSN 1860 - 5508

A note on quality of a firm's exports and distance to destination countries: First evidence from Germany Joachim Wagner

Leuphana University Lueneburg, Germany, and CESIS, KTH Stockholm, Sweden

[This version: July 10, 2014]

Abstract:

This note uses a tailor-made new data set to investigate for the first time the link between the quality of a firm's exports and the distance to destination countries for Germany. To anticipate the most important result, it is shown that the quality of exported goods and the distance to destination countries are *not* statistically positively correlated.

Keywords: Exports, export quality, distance, Germany JEL Classification: F14

* All computations were done at the Research Data Centre of the Statistical Office of Berlin-Brandenburg in Berlin. The firm-level data used are strictly confidential but not exclusive; see <u>http://www.forschungsdatenzentrum.de/datenzugang.asp</u> for information on how to access the data. To facilitate replications the Stata do-file used is available from the author on request.

Prof. Dr. Joachim Wagner Leuphana University Lueneburg Institute of Economics PO Box 2440 D-21314 Lueneburg, Germany

e-mail: <u>wagner@leuphana.de</u> www: <u>http://www.leuphana.de/joachim-wagner.html</u>

1. Motivation

In a recently published paper Feenstra and Romalis (2014) present a theoretical model where firms, in addition to choosing the price, simultaneously choose quality subject to non-homothetic demand in an extended monopolistic competition framework. They show that in this model of endogenous quality choice by firms goods of higher quality are shipped longer distances. This positive relationship between quality of exports and distance to destination countries follows from the first-order condition of firms for optimal quality choice (see Feenstra and Ronalis (2014) for details). Bastos and Silva (2010, p. 100) discuss other recent theoretical models that relate the quality of exported products to the distance of destination countries and argue that the systematic increase of unit values (used as proxy variables for the quality of goods) with distance is linked to self-selection of heterogeneous firms across destinations, with only higher quality producers entering more distant markets.

Empirical evidence on the relationship between quality of exports and distance to destination countries is scarce. Bastos and Silva (2010, p. 99) termed the quality of exports and its drivers "a relatively unexplored dimension of firms' cross-border activities". Using Portuguese firm-level data on exports by product and destination market from 2005, they find that export unit values (used as the proxy-variable for export quality) increase systematically with distance.

As yet, comparable evidence for Germany has not been reported in the literature. This can be considered as an important gap in knowledge for at least two reasons. First of all, Germany is one of the most important actors on the world market

2

for goods.¹ Empirical evidence on the relation between export quality and distance to destination countries for this large "global player", therefore, is interesting in itself. Second, Germany is a high-wage economy, and the international competitiveness of goods produced in Germany is widely considered to depend on non-price factors, especially on product quality.² Further evidence on the role of quality of exported goods in shaping the spatial distribution of German exports, therefore, adds to our knowledge with regard to an important aspect of international competitiveness of German manufacturing firms.³

This note uses a tailor-made new data set to investigate for the first time the link between the quality of a firm's exports and the distance to destination countries for Germany. To anticipate the most important result, contrary to both the implications of the theoretical model by Feenstra and Romalis (2014) and other recent models, and to the empirical results reported for Portuguese firms by Bastos and Silva (2010), it is shown that the quality of exported goods and the distance to destination countries are *not* statistically positively correlated.

The rest of the paper is organized as follows. Section 2 discusses the data and measurement issues. Section 3 presents the results of the empirical investigation. Section 4 concludes.

¹ According to the World Trade Organization's World Trade Report 2012 Germany hold rank 3 among the exporters of goods in 2011 with a share of 8.1 percent; see World Trade Organization (2012, p. 30).

² See the recent report by the Federal Ministry of Economics and Energy (Bundesministerium für Wirtschaft und Energie (2014)).

³ Other aspects of the quality of exports by German firms discussed in recent papers are the role of high-quality goods for the international competitiveness of low-productive exporters (Wagner 2014a), the relation between high-quality inputs and high-quality exports (Wagner 2014b) and the links between firm profitability and quality of exports (Wagner 2014c).

2. Data and measurement issues

The lack of empirical studies for Germany on the link between the distance to destination countries and the quality of exported goods is due to the fact that until most recently suitable data at the level of the firm that could be used in an econometric investigation were not available. The empirical investigation here uses a tailor-made data set that combines for the first time high quality firm-level data from two official sources with data on the distance between Germany and destination countries of exports.

Information on the goods traded internationally is available from the statistic on foreign trade (*Außenhandelsstatistik*). This statistic is based on two sources. One source is the reports by German firms on transactions with firms from countries that are members of the European Union (EU); these reports are used to compile the so-called *Intrahandelsstatistik* on intra-EU trade. The other source is transaction-level data collected by the customs on trade with countries outside the EU (the so-called *Extrahandelsstatistik*).⁴ Data in the statistic of foreign trade are transaction-level data, i.e. they relate to one transaction of a German firm with a firm located outside Germany at a time.

For the reporting year 2010 these transaction-level data have been aggregated at the level of the exporting firm. Using the firms' registration number for turnover tax statistics these data were matched with the enterprise register system (*Unternehmensregister-System*) and with the enterprise level data from the two other sources discussed above. For each exporting firm that reported either to the statistic

⁴ Note that firms with a value of exports to EU-countries that does not exceed 400,000 Euro do not have to report to the statistic on intra-EU trade. For trade with firms from non-member countries all transactions that exceed 1,000 Euro are registered. For details see Statistisches Bundesamt, Qualitätsbericht Außenhandel, Januar 2011.

on intra-EU trade, or to the statistic on trade with countries outside the EU, we know from the data the value and the volume of exports for the ten most important exported goods. This information is used to compute an index for the quality of exports. Furthermore, this data has information about the ten most important destination countries of exports and the value of exports to these countries. Combined with information on the distance between Germany and each of the destination countries this information is used to compute an index of the distance of exports of a firm. Details on the construction of these two indices are given below.

The second source of firm level information is the regular survey of establishments from manufacturing industries by the Statistical Offices of the German federal states. The survey covers all establishments from manufacturing industries that employ at least twenty persons in the local production unit or in the company that owns the unit. Participation of firms in the survey is mandated in official statistics (see Malchin and Voshage (2009) for details). For this study establishment data were aggregated to the enterprise level to match the unit of observation in the other data sources (described below). From this survey information is used on a number of control variables included in the empirical models.

Data on distance between Germany and the destination countries of exports are taken from the CEPII's *GeoDist* database (Mayer and Zignago 2011). The "distw" – measure is used that calculates the distance between two countries based on bilateral distances between the biggest cities of those two countries, those inter-city distances being weighted by the share of the city in the overall country's population (see Mayer and Zignango (2011, p. 11) for details).

With these data it is possible to investigate the relationship between the quality of goods exported and the distance to the destination countries.

5

The *quality of exported goods* is defined as the unit value of exports and computed as value of exports (measured in Euro) over quantity of exports (measured in tons). This measure of quality is widely used in the empirical literature. While it is far from perfect, it can be considered as a suitable proxy-variable, because the "unit values of internationally traded goods are heavily influenced by quality" (Feenstra and Romalis (2014, p. 477)). In the data set used here we have information on the value of exports and the quantity of exports for the ten most important products (measured by the value of exports) exported by a firm. For firms that exported more than one good the unit value of exports is the weighted sum of the unit values of the (up to ten) different goods exported, and the weights are the shares of the value of exports of a good in the total exports of the firm of these (up to ten) goods.

Distance to export destination is measured by the distw-index between Germany and the destination country provided in the CEPII database (that is discussed above). For firms that exported to more than one country distance is computed as the weighted sum of the distance to (up to ten) destination countries, and the weights are the shares of the value of exports to a country in the total exports of the firm to these (up to ten) countries.

The empirical model includes a number of control variables. The *number of employees* (also included in squares to take care of non-linearity) is included to control for any relationship between firm size and distance to destination countries. Furthermore, a complete set of *4-digit level industry dummy variables* is included to control for the role of industry-specific factors related to take care of differences across industries due to the nature of the products (e.g., mobile phones and cement).

Given that the East German economy still differs in many respects from the West German economy, especially with regard to exporting (see Wagner (2008)),

and that the number of exporting firms is small in East Germany this study looks at West German manufacturing enterprises only.

3. Results

The sample used in the empirical investigation is made of 10,746 enterprises with complete information on the index of distance to export destination countries and the index of quality of exports in 2010. Descriptive statistics for both indices are reported in Table 1.The distance index varies between 378 kilometers (which refers to a firm with exports to Luxembourg only) and more than 8,500 kilometers at least.⁵ The index of export quality varies widely between next to zero and next to 1,700. Note, however, that these are unconditional descriptive statistics that do not control for the industries the firms are in. Therefore, the large range between the top and the bottom of the (weighted sum of the) value-to-weight ratio comes at no surprise – think, for example, of mobile phones and cement. This fact points to the need to control for detailed industry affiliation of the firms in an empirical investigation of the relation between distance to export destination countries and quality of exports.

[Table 1 near here]

Descriptive statistics on the share of exports and the distance to destination countries by the ten most important destination countries of exports are reported in Table 2. While 10.8 percent of all firms exported to a single destination country only, 68 percent exported to ten or more countries. However, the shares of exports among

⁵ Note that the minimum and maximum values of both indices cannot be reported because they refer to a single firm and, therefore, this information is confidential.

all exports to the ten most important destination countries declines rather rapidly from the most important to less important countries. On average, nearly half of all exports are shipped to the most important destination, and the top five destinations cover on average 87 percent of all exports. Interestingly, the average distance to the destination countries served by a firm does not vary much between firms that export to different numbers of countries. Multi-country exporters do not systematically serve markets that are farther away from Germany.

[Table 2 near here]

To investigate the link between the distance to destination and the quality of exports regression models are estimated with the value of the index of distance to export destination countries as the dependent variable and the value of the index of the quality of the goods exported by a firm plus controls as the independent variables. Note that these regressions are not meant to explain the distance to destination countries of exports by the firms – they are just empirical models to look for the presence and size of any correlation between export quality and distance to destinations of the firms, controlling for other firm characteristics. That said, results for two models are reported in Table 3. Model 1 includes only the detailed 4-digit industry dummy variables as control variables, while model 2 controls for firm size (measured by the number of employees, also included in squares to control for a non-linear relationship), too.

[Table 3 near here]

8

The most important result is that the link between the distance to destination countries and the quality of exported goods is positive but statistically insignificant at any conventional level. The point estimates for the regression coefficient of the export quality index and the prob-values do not differ between the two empirical models, so controlling for firm size does not change the big picture.⁶ A glance at the point estimates for export quality reveals that even if the regression coefficients were statistically significantly different from zero, the link with the distance index would have to be considered to be non-existent from an economic point of view. A ceteris paribus increase of the quality index by 154 (the unconditional mean of this index according to Table 1) is linked to an increase in the index of the distance to destinations by 3.6 kilometers according to the results of model 1, and this is next to zero.. An increase of quality by one standard deviation (i.e. by 1728.43) means an increase of the estimated distance to destination by 39.8 kilometers, again a tiny amount.

4. Discussion

Results of the empirical investigation presented in section 3 are neither in line with the implication of the theoretical model by Feenstra and Romalis (2014) or other recent models that discuss the link between the quality of exported goods and the

⁶ Firm size serves as control variable only. Therefore, we will not discuss the results for the coefficient estimates at some length. Suffice it to say here that the estimates point to a hump-shaped relation between firm size and distance to destination markets. However, the estimated maximum of this link is reached for 133,896 employees and the firm at the 99th percentile of the distribution of the number of employees has 1,923 employees only. Therefore, the estimation results indicate that larger firms tend to export to more distant markets. Note that the index of export quality and firm size are uncorrelated in the sample (r = 0.0033).

distance to destination countries, nor are they in line with the empirical results reported for Portuguese firms by Bastos and Silva (2010).

One reason for this empirical finding is the spatial distribution of German exports. In 2010 (the year the data analyzed here are from) 71 percent of all exports went to countries in Europe⁷ where differences in distance to destination countries do not matter (much).

Another reason is that even if the distance to destination countries is large (like in the case of China with a share in total exports of 5.65% or the US with a share of 6.89% in total German exports in 2010) distance related transport costs do not matter much (if at all) in the age of containers that are used to ship goods around the world at next to no costs.⁸ Practitioners in world trade are well aware of this. Michael Behrendt, CEO of Hapag-Lloyd (one of the biggest players on the world market for container transportation), pointed out in 2008 that it costs 10 Dollar to ship a TV-set from China to Europe, one Dollar to ship a vacuum cleaner, and one cent to ship a bottle of beer.⁹ Economists realized this, too. As Glaeser and Kohlhase (2004, p. 199) put it, today "it is better to assume that moving goods is essentially costless than to assume that moving goods is an important component of the production process. (...) Certainly it is an exaggeration to claim that moving goods is free, but it is becoming an increasingly apt assumption." If shipping costs are tiny even over large distances, relative shipping costs for high-quality high-price goods and low-quality

⁷ See the Statistical Yearbook published by the German Statistical Office (Statistisches Bundesamt, Statistisches Jahrbuch 2012, p. 415).

⁸ See Levinson (2006) for a comprehensive discussion of the role of container transport in world trade.

⁹ See the interview in Der Spiegel 1/2008, p. 62-63.

low-price goods do not differ much, and not only high-quality goods are shipped over longer distances.

To put it differently, the lack of any systematic relation between quality of exports and distance to destination countries for German exports reported in this study for the first time points out that high quality of exports matters irrespective of the destination country.

5. References

- Bastos, Paulo and Joana Silva (2010), The quality of a firm's exports: Where you export to matters. *Journal of International Economics* 82 (1), 99 111.
- Bundesministerium für Wirtschaft und Energie (2014), Schlaglichter der Wirtschaftspolitik, Monatsbericht Mai 2014, Hintergründe zum deutschen Leistungsbilanzüberschuss, p. 19-23.
- Feenstra, Robert C. and John Romalis (2014), International prices and endogeneous quality. *Quarterly Journal of Economics* 129 (2), 477-527.
- Glaeser, Edward L. and Janet E. Kohlhase (2004), Cities, regions, and the decline of transportation costs. *Papers in Regional Science* 83 (1), 197-228.
- Levinson, Marc (2006), The Box. How the Shipping Container Made the World Smaller and the World Economy Bigger. Princeton and Oxford: Princeton University Press.
- Malchin, Anja and Ramona Voshage (2009), Official Firm Data for Germany. Schmollers Jahrbuch / Journal of Applied Social Science Studies 129 (3), 501-513.
- Mayer, Thierry and Soledad Zignago (2011), Notes on CEPII's distance measures: The GeoDist database. CEPII Document de Travail No 2011-25, December.

- Wagner, Joachim (2008), A note why more West than East German firms export. International Economics and Economic Policy 5 (4), 363-370.
- Wagner, Joachim (2014a), Low-productive exporters are high-quality exporters. Evidence from Germany. *Economics Bulletin* 34 (2), 745-756.
- Wagner, Joachim (2014b), What makes a high-quality exporter? Evidence from Germany. *Economics Bulletin* 34 (2), 865-874.
- Wagner, Joachim (2014c), Exports and Firm Profitability: Quality matters! University of Lueneburg Working Paper Series in Economics N0. 296, March.
- World Trade Organization (2012), World Trade Report 2012. Geneva: WTO Publications.

Table 1: Distance to destination countries and export quality, West German firms, 2010

	Distance to destination countries (index)	Quality of exports (index)	
Mean	2258.23	154.03	
Standard deviation	2103.09	1728.43	
p1	378.00	0.24	
p10	546.86	1.78	
p50	1284.98	16.15	
p90	5592.43	174.23	
p99	8576.41	1681.67	
Number of firms	10,746	10,746	

<u>Note</u>: For a detailed definition of the indices of distance to destination countries and export quality see text. p1, ..., p99 refer to the 1st, ..., 99th percentile of the distribution of the index (minima and maxima cannot be reported due to violation of privacy).

	Number of exporters with at least 1, 2,, 10 different destination contries	Average share of exports to destination country 1, 2,, 10 (percent)	Average distance to destination country 1, 2,, 10 (index)
Country			
1	10,746	45.49	2282.64
2	9,583	18.35	2319.82
3	9,358	10.67	2338.68
4	9,024	7.15	2334.57
5	8,786	5.18	2383.51
6	8,489	3.93	2411.69
7	8,219	3.08	2442.99
8	7,974	2.45	2639.32
9	7,704	2.01	2595.58
10	7,318	1.66	2,631.27

Table 2: Share of exports and distance to destination by 10 most important countries

<u>Note</u>: For a detailed definition of the indices of distance to destination countries and export quality see text. p1, ..., p99 refer to the 1st, ..., 99th percentile of the distribution of the index (minima and maxima cannot be reported due to violation of privacy).

	Dependent variable: Distance to export destination countries (index)		
Enterprise characteristic	Model	1	2
Quality of exported goods (index)	ß p	0.023 0.160	0.022 0.170
Number of employees	ß p		0.111 0.001
Number of employees (squared)	Ռ p		-8.29e-7 0.009
Constant	ß p	2254.74 0.000	2232.88 0.000
I-digit industry controls		yes	yes
R-squared		0.175	0.176
No. of enterprises		10,746	10,746

Table 3: Distance to destination countries and quality of exports: Regression results

<u>Note</u>: OLS regressions.ß is the estimated regression coefficient, p is the prob-value (based on heteroscedasticity-consistent standard errors).For a detailed definition of the variables see text.

Working Paper Series in Economics

(recent issues)

No.301:	Ahmed Fayez Abdelgouad: Determinants of Using Fixed-term Contracts in the Egyptian Labor Market: Empirical Evidence from Manufacturing Firms Using World Bank Firm- Level Data for Egypt, July 2014
No.300:	Annika Pape: Liability Rule Failures? Evidence from German Court Decisions, May 2014
No.299:	<i>Annika Pape:</i> Law versus Economics? How should insurance intermediaries influence the insurance demand decision, June 2013
No.298:	<i>Joachim Wagner:</i> Extensive Margins of Imports and Profitability: First Evidence for Manufacturing Enterprises in Germany, May 2014
No.297:	<i>Joachim Wagner:</i> Is Export Diversification good for Profitability? First Evidence for Manufacturing Enterprises in Germany, March 2014
No.296:	Joachim Wagner: Exports and Firm Profitability: Quality matters!, March 2014
No.295:	<i>Joachim Wagner:</i> What makes a high-quality exporter? Evidence from Germany, March 2014 [published in: Economics Bulletin 34 (2014), 2, 865-874]
No.294:	<i>Joachim Wagner:</i> Credit constraints and margins of import: First evidence for German manufacturing enterprises, February 2014
No.293:	<i>Dirk Oberschachtsiek</i> : Waiting to start a business venture. Empirical evidence on the determinants., February 2014
No.292:	<i>Joachim Wagner</i> : Low-productive exporters are high-quality exporters. Evidence from Germany, February 2014 [published in: Economics Bulletin 34 (2014), 2, 745-756]
No.291:	Institut für Volkswirtschaftslehre: Forschungsbericht 2013, Januar 2014
No.290:	Stefan Baumgärtner, Moritz A. Drupp und Martin F. Quaas: Subsistence and substitutability in consumer preferences, December 2013
No.289:	<i>Dirk Oberschachtsiek</i> : Human Capital Diversity and Entrepreneurship. Results from the regional individual skill dispersion nexus on self-employment activity., December 2013
No.288:	<i>Joachim Wagner and John P. Weche Gelübcke</i> : Risk or Resilience? The Role of Trade Integration and Foreign Ownership for the Survival of German Enterprises during the Crisis 2008-2010, December 2013
No.287:	<i>Joachim Wagner</i> : Credit constraints and exports: A survey of empirical studies using firm level data, December 2013

- No.286: Toufic M. El Masri: Competition through Cooperation? The Case of the German Postal Market, October 2013
- No.285: Toufic M. El Masri: Are New German Postal Providers Successful? Empirical Evidence Based on Unique Survey Data, October 2013
- Andree Ehlert, Dirk Oberschachtsiek, and Stefan Prawda: Cost Containment and No.284: Managed Care: Evidence from German Macro Data, October 2013

- No.283: Joachim Wagner and John P. Weche Gelübcke: Credit Constraints, Foreign Ownership, and Foreign Takeovers in Germany, September 2013
- No.282: Joachim Wagner: Extensive margins of imports in The Great Import Recovery in Germany, 2009/2010, September 2013 [published in: Economics Bulletin 33 (2013), 4, 2732-2743]
- No.281: Stefan Baumgärtner, Alexandra M. Klein, Denise Thiel, and Klara Winkler: Ramsey discounting of ecosystem services, August 2013
- No.280: Antonia Arsova and Deniz Dilan Karamen Örsal: Likelihood-based panel cointegration test in the presence of a linear time trend and cross-sectional dependence, August 2013
- No.279: *Thomas Huth*: Georg von Charasoff's Theory of Value, Capital and Prices of Production, June 2013
- No.278: Yama Temouri and Joachim Wagner: Do outliers and unobserved heterogeneity explain the exporter productivity premium? Evidence from France, Germany and the United Kingdom, June 2013 [published in: Economics Bulletin, 33 (2013), 3, 1931-1940]
- No.277: Horst Raff and Joachim Wagner: Foreign Ownership and the Extensive Margins of Exports: Evidence for Manufacturing Enterprises in Germany, June 2013
- No.276: Stephan Humpert: Gender Differences in Life Satisfaction and Social Participation, May 2013
- No.275: Sören Enkelmann and Markus Leibrecht: Political Expenditure Cycles and Election Outcomes Evidence from Disaggregation of Public Expenditures by Economic Functions, May 2013
- No.274: Sören Enkelmann: Government Popularity and the Economy First Evidence from German Micro Data, May 2013
- No.273: *Michael Berlemann, Soeren Enkelmann,* and *Torben Kuhlenkasper*: Unraveling the Relationship between Presidential Approval and the Economy A Multi-Dimensional Semi-Parametric Approach, May 2013
- No.272: *Michael Berlemann* and *Sören Enkelmann*: The Economic Determinants of U.S. Presidential Approval A Survey, May 2013
- No.271: Soeren Enkelmann: Obama and the Macroeconomy Estimating Social Preferences Between Unemployment and Inflation, May 2013
- No.270: Anja Köbrich León: Does Cultural Heritage affect Employment decisions Empirical Evidence for Second Generation Immigrants in Germany, April 2013
- No.269: Anja Köbrich León and Christian Pfeifer: Religious Activity, Risk Taking Preferences, and Financial Bahavior, April 2013
- No.268: Anja Köbrich León: Religion and Economic Outcomes Household Savings Bahavior in the USA, April 2013
- No.267: John P. Weche Gelübcke and Isabella Wedl: Environmental Protection of Foreign Firms in Germany: Does the country of origin matter?, April 2013
- No.266: Joachim Wagner: The Role of extensive margins of exports in The Great Export Recovery in Germany, 2009/2010, March 2013
- No.265: *John-Oliver Engler* and *Stefan Baumgärtner*: Model choice and size distribution: a Bayequentist approach, February 2013

- No.264: *Chiara Franco* and *John P. Weche Gelübcke*: The death of German firms: What role for foreign direct investment?, February 2013
- No.263: *Joachim Wagner*: Are low-productive exporters marginal exporters? Evidence from Germany, February 2013 [published in Economics Bulletin 33 (2013), 1, 467-481]
- No.262: Sanne Hiller, Philipp J. H. Schröder, and Allan Sørensen: Export market exit and firm survival: theory and first evidence, January 2013
- No.261: Institut für Volkswirtschaftslehre: Forschungsbericht 2012, Januar 2013
- No.260: Alexander Vogel and Joachim Wagner: The Impact of R&D Activities on Exports of German Business Services Enterprises : First Evidence from a continuous treatment approach, December 2012
- No.259: *Christian Pfeifer*: Base Salaries, Bonus Payments, and Work Absence among Managers in a German Company, December 2012
- No.258: Daniel Fackler, Claus Schnabel, and Joachim Wagner: Lingering illness or sudden death? Pre-exit employment developments in German establishments, December 2012
- No.257: *Horst Raff* and *Joachim Wagner*: Productivity and the Product Scope of Multi-product Firms: A Test of Feenstra-Ma, December 2012 [published in: Economics Bulletin, 33 (2013), 1, 415-419]
- No.256: *Christian Pfeifer* and *Joachim Wagner*: Is innovative firm behavior correlated with age and gender composition of the workforce? Evidence from a new type of data for German enterprises, December 2012
- No.255: *Maximilian Benner*: Cluster Policy as a Development Strategy. Case Studies from the Middle East and North Africa, December 2012
- No.254: Joachim Wagner und John P. Weche Gelübcke: Firmendatenbasiertes Benchmarking der Industrie und des Dienstleistungssektors in Niedersachsen Methodisches Konzept und Anwendungen (Projektbericht), Dezember 2012
- No.253: *Joachim Wagner*: The Great Export Recovery in German Manufacturing Industries, 2009/2010, November 2012 [published in: Review of Economics 64 (2013), 3, 325-340]
- No.252: Joachim Wagner: Daten des IAB-Betriebspanels und Firmenpaneldaten aus Erhebungen der Amtlichen Statistik substitutive oder komplementäre Inputs für die Empirische Wirtschaftsforschung?, Oktober 2012 [publiziert in: Journal of Labour Market Research 47 (2014), 1-2, 63-70]
- No.251: *Joachim Wagner*: Credit constraints and exports: Evidence for German manufacturing enterprises, October 2012 [published in: Applied Economics 46 (2014), 3, 294-302]
- No.250: *Joachim Wagner*: Productivity and the extensive margins of trade in German manufacturing firms: Evidence from a non-parametric test, September 2012 [published in: Economics Bulletin 32 (2012), 4, 3061-3070]
- No.249: John P. Weche Gelübcke: Foreign and Domestic Takeovers in Germany: First Comparative Evidence on the Post-acquisition Target Performance using new Data, September 2012
- No.248: *Roland Olbrich, Martin Quaas,* and *Stefan Baumgärtner*: Characterizing commercial cattle farms in Namibia: risk, management and sustainability, August 2012

(see www.leuphana.de/institute/ivwl/publikationen/working-papers.html for a complete list)

Leuphana Universität Lüneburg Institut für Volkswirtschaftslehre Postfach 2440 D-21314 Lüneburg Tel.: ++49 4131 677 2321 email: brodt@leuphana.de

www.leuphana.de/institute/ivwl/publikationen/working-papers.html