Online Appendix

How Elastic is Labor Demand?
A Meta-Analysis for the German Labor Market

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Content

A Meta-Sample: Further Evidence

Table A1: Description of Meta-Sample for the German Labor Market

	Empirical Model	Output Decision	Time Horizon	Unit of Observation	Margin of Adjustment	Firm Types	Worker Types	Data	Years
Griffin and Gregory (1976)	structural-form	conditional	long-run	economy	not stated	none	none	panel	1955-1969
Franz (1977)	reduced-form	conditional	short-/long-run	economy	workers/hours	none	gender	time series	1960-1975
Pindyck (1979)	structural-form	conditional	long-run	economy	not stated	none	none	panel	1963-1973
Koellreuter (1980)	reduced-form	conditional	short-/long-run	industry	workers	industry	none	time series	1970-1977
Kirkpatrick (1982)	reduced-form	unconditional	long-run	industry	workers	none	none	time series	1960-1979
Roth (1982)	reduced-form	unconditional	short-run	economy	workers	none	none	time series	1970-1979
Hansen (1983)	structural-form	conditional	long-run	industry	workers	industry	none	panel	1960-1976
Symons and Layard (1984)	reduced-form	unconditional	short-/medium-run	industry	workers	none	none	time series	1956-1980
Mairesse and Dormont (1985)	reduced-form	unconditional	medium-run	firm	workers	none	none	panel	1970-1979
Franz and König (1986)	reduced-form	conditional	short-/long-run	industry	workers/hours	industry	none	time series	1964-1983
Nakamura (1986)	structural-form	conditional	long-run	industry	not stated	industry	none	time series	1960-1980
Heise (1987)	reduced-form	unconditional	medium-run	industry	not stated	none	none	time series	1968-1983
Jahnke (1987)	reduced-form	conditional	short-/long-run	economy	hours	none	none	time series	1971-1985
Hart and Kawasaki (1988)	reduced-form	conditional	short-run	industry	workers/hours	none	none	time series	1951-1981
König and Pohlmeier (1988)	structural-form	conditional	long-run	economy	workers/hours	none	none	time series	1964-1983
Stark and Jänsch (1988)	structural-form	conditional	long-run	industry	hours	industry	none	time series	1960-1985
Begg et al. (1989)	reduced-form	unconditional	short-run	economy	hours	none	none	time series	1953-1986
Flaig and Steiner (1989)	reduced-form	conditional	long-run	industry	workers	none	none	time series	1963-1986
König and Pohlmeier (1989)	structural-form	conditional	long-run	industry	workers/hours	none	none	panel	1964-1983
Entorf and Pohlmeier (1990)	reduced-form	conditional	medium-run	firm	workers	none	none	cross section	1984
Kraft (1991)	reduced-form	conditional	short-run	industry	workers	industry	none	time series	1968-1987
Breitung (1992a)	reduced-form	conditional	short-run	firm	hours	none	none	panel	1978-1989

NOTE. — The table provides an overview of empirical studies that determine and display own-wage elasticities of labor demand for the German labor market. Source: Own illustration.

Table A1: Description of Meta-Sample for the German Labor Market (Cont.)

	Empirical Model	Output Decision	Time Horizon	Unit of Observation	Margin of Adjustment	Firm Types	Worker Types	Data	Years
Breitung (1992b)	reduced-form	conditional	short-/long-run	firm	hours	none	none	panel	1978-1989
Funke (1993)	reduced-form	conditional	short-run	industry	workers	none	none	time series	1969-1989
Breitung (1994)	reduced-form	conditional	short-/long-run	firm	hours	none	none	panel	1978-1990
Fitzroy and Funke (1994)	reduced-form	conditional	short-run	industry	workers	none	none	panel	1979-1990
Broadberry and Ritschl (1995)	reduced-form	conditional	short-run	economy	hours	none	none	time series	1923-1938
König, Buscher, and Licht (1995)	reduced-form	conditional	long-run	firm	workers	region	none	cross section	1993
Belke and Göcke (1996)	reduced-form	conditional	short-/long-run	economy	workers	none	none	time series	1970-1992
Bauer and Zimmermann (1997)	structural-form	conditional	long-run	economy	hours	none	skill	cross section	1993
Bellmann and Kölling (1997)	reduced-form	conditional	short-run	firm	workers	region	none	panel	1993-1996
Falk and Koebel (1997)	structural-form	conditional	long-run	industry	workers	industry	skill	panel	1977-1994
Blechinger et al. (1998)	reduced-form	conditional	long-run	firm	workers	none	none	panel	1992
Fitzenberger and Franz (1998)	structural-form	conditional	medium-run	industry	workers	industry	skill	panel	1975-1990
Fitzroy and Funke (1998)	reduced-form	conditional	short-/medium-run	industry	workers	region	skill	panel	1991-1993
Koebel (1998)	structural-form	conditional	long-run	industry	hours	industry	none	panel	1960-1992
Kölling (1998)	reduced-form	conditional	short-run	firm	workers	none	requirement	panel	1993-1996
Riphahn and Bauer (1998)	reduced-form	unconditional	short-run	industry	workers/hours	none	none	panel	1980-1993
Rottmann and Ruschinski (1998)	reduced-form	conditional	short-/long-run	firm	workers	none	none	panel	1980-1992
Trabert et al. (1998)	reduced-form	conditional	long-run	industry	hours	none	none	cross section	1996
Bellmann, Bender, and Schank (1999)	structural-form	conditional	medium-run	firm	workers	none	skill/collar	cross section	1995
Blechinger and Pfeiffer (1999)	reduced-form	conditional	long-run	firm	workers	size	none	panel	1992-1995
Buslei and Steiner (1999)	structural-form	conditional	medium-run	industry	workers/hours	industry	skill/gender	panel	1984-1995
Falk and Koebel (1999)	structural-form	conditional	long-run	industry	workers	none	skill	panel	1978-1999

NOTE. — The table provides an overview of empirical studies that determine and display own-wage elasticities of labor demand for the German labor market. Source: Own illustration.

Table A1: Description of Meta-Sample for the German Labor Market (Cont.)

	Empirical Model	Output Decision	Time Horizon	Unit of Observation	Margin of Adjustment	Firm Types	Worker Types	Data	Years
Fitzenberger (1999)	structural-form	conditional	medium-run	industry	workers	industry	skill	panel	1970-1990
Funke, Maurer, and Strulik (1999)	reduced-form	conditional	short-run	firm	workers	none	none	panel	1987-1994
Bellmann and Schank (2000)	structural-form	conditional	medium-run	firm	workers	none	skill/collar	cross section	1995
Schalk and Untiedt (2000)	reduced-form	(un-)conditional	long-run	industry	workers	none	none	panel	1979-1989
Addison and Teixeira (2001)	reduced-form	conditional	long-run	industry	workers	none	none	time series	1977-1997
Falk and Koebel (2001)	structural-form	conditional	short-/medium-run	industry	workers	none	skill	panel	1976-1995
Flaig and Rottmann (2001)	structural-form	conditional	medium-/long-run	industry	hours	none	none	panel	1968-1995
Bauer and Riphahn (2002)	reduced-form	conditional	short-/medium-run	industry	workers/hours	none	none	panel	1977-1994
Bellmann et al. (2002)	structural-form	conditional	medium-run	firm	workers	region	skill	cross section	1998
Falk (2002)	reduced-form	conditional	medium-run	firm	workers	none	none	panel	1995-1997
Falk and Koebel (2002)	structural-form	conditional	medium-run	industry	workers	none	skill	panel	1978-1990
Koebel (2002)	structural-form	conditional	long-run	industry	workers	none	skill	panel	1978-1990
Schneider et al. (2002)	structural-form	conditional	long-run	region	hours	none	income	cross section	2000
Barba Navaretti et al. (2003)	reduced-form	conditional	short-/long-run	firm	workers	multinational	none	panel	1993-2000
Kölling and Schank (2003)	structural-form	conditional	medium-run	firm	workers	industry	skill	panel	1994-1997
Falk and Koebel (2004)	structural-form	conditional	medium-run	industry	workers	industry	skill	panel	1978-1994
Addison and Teixeira (2005)	reduced-form	conditional	medium-run	industry	workers	none	none	time series	1977-1997
Addison and Teixeira (2005)	reduced-form	unconditional	short-run	firm	workers	industry/region	none	panel	1993-2001
Becker et al. (2005)	structural-form	conditional	medium-run	firm	workers	region	region	cross section	2000
Cuyvers et al. (2005)	structural-form	conditional	medium-/long-run	industry	workers	industry	region	panel	1994-1998
Bellmann and Pahnke (2006)	reduced-form	conditional	short-run	firm	workers	region	skill	panel	1996-2004
Blien, Kirchhof, and Ludewig (2006)	reduced-form	conditional	short-/medium-run	firm	workers	industry	none	panel	1993-2002

NOTE. — The table provides an overview of empirical studies that determine and display own-wage elasticities of labor demand for the German labor market. Source: Own illustration.

Table A1: Description of Meta-Sample for the German Labor Market (Cont.)

	Empirical Model	Output Decision	Time Horizon	Unit of Observation	Margin of Adjustment	Firm Types	Worker Types	Data	Years
Koebel (2006)	structural-form	conditional	long-run	industry	workers	none	skill	panel	1976-1995
Konings and Murphy (2006)	reduced-form	conditional	short-/long-run	firm	workers	industry	none	panel	1993-1998
Crinó (2007)	structural-form	conditional	medium-run	industry	hours	none	skill	panel	1990-2004
Lachenmaier and Rottmann (2007)	reduced-form	conditional	long-run	firm	workers	region/size	none	panel	1982-2003
Molnar, Pain, and Taglioni (2007)	reduced-form	conditional	short-/long-run	industry	workers	industry	none	panel	1994-2001
Addison et al. (2008)	structural-form	conditional	medium-run	firm	workers	industry	skill/collar	panel	1993-2002
Falk and Wolfmayr (2008)	reduced-form	conditional	long-run	industry	workers	industry	none	panel	1995-2000
Jacobi and Schaffner (2008)	structural-form	conditional	medium-run	industry	workers	region	skill/type	panel	1999-2005
Agnolucci (2009)	structural-form	conditional	long-run	industry	workers	industry	none	time series	1978-2004
Buscher et al. (2009)	reduced-form	unconditional	long-run	economy	workers	none	none	time series	1973-2003
Winkler and Milberg (2009)	reduced-form	conditional	medium-run	industry	workers	none	none	panel	1995-2004
Brixy and Fuchs (2010)	reduced-form	conditional	short-/long-run	firm	hours	none	none	panel	2001-2006
Buch and Lipponer (2010)	reduced-form	conditional	short-/long-run	firm	workers	multinational	none	panel	1997-2004
Freier and Steiner (2010)	structural-form	conditional	medium-run	industry	workers/hours	region	skill/gender/type	panel	1999-2003
Hijzen and Swaim (2010)	reduced-form	(un-)conditional	medium-run	industry	workers	industry	none	panel	1995-2000
Mattes (2010)	reduced-form	conditional	short-run	firm	workers	none	skill	panel	2002-2007
Muendler and Becker (2010)	structural-form	conditional	medium-run	firm	workers/hours	region	region	panel	1998-2001
Bohachova et al. (2011)	reduced-form	conditional	short-run	firm	workers	none	none	panel	2000-2008
Fauser (2011)	reduced-form	conditional	short-run	region	hours	region	none	panel	1975-2005
Crinó (2012)	structural-form	conditional	medium-run	industry	hours	none	skill	panel	1990-2004
Kölling (2012)	structural-form	conditional	long-run	firm	workers	none	none	panel	2000-2007
Peichl and Siegloch (2012)	structural-form	conditional	long-run	firm	workers	none	skill	panel	1996-2007

NOTE. — The table provides an overview of empirical studies that determine and display own-wage elasticities of labor demand for the German labor market. Source: Own illustration.

Table A1: Description of Meta-Sample for the German Labor Market (Cont.)

	Empirical Model	Output Decision	Time Horizon	Unit of Observation	Margin of Adjustment	Firm Types	Worker Types	Data	Years
Truett and Truett (2013)	structural-form	conditional	long-run	industry	workers	region	none	time series	1975-2007
Cox et al. (2014)	structural-form	conditional	medium-run	industry	workers	none	skill/collar	panel	2003-2007
Cox et al. (2014)	reduced-form	unconditional	medium-run	industry	workers	none	skill/collar	panel	2003-2007
Judzik (2014)	reduced-form	conditional	short-run	industry	workers	industry	none	panel	1993-2011
Jung (2014)	reduced-form	conditional	short-run	firm	workers	region	none	panel	1996-2010
Bramucci (2015)	reduced-form	conditional	medium-run	industry	workers	industry	collar	panel	1999-2011
Seo, Kim, and Lee (2015)	reduced-form	conditional	short-run	industry	workers	export	none	panel	1990-2009
Herwartz and Niebuhr (2017)	structural-form	conditional	medium-run	industry	workers	none	none	panel	1980-2008
Lichter, Peichl, and Siegloch (2017)	reduced-form	unconditional	medium-run	firm	workers	export	skill	panel	1996-2008
Lichter, Peichl, and Siegloch (2017)	structural-form	conditional	long-run	firm	workers	export	skill	panel	1996-2008
Kölling (2017)	structural-form	conditional	long-run	firm	workers	none	none	panel	1996-2008
Kölling (2018)	reduced-form	unconditional	long-run	firm	workers	none	skill	panel	2001-2014
Kölling (2019)	structural-form	conditional	long-run	firm	workers	ownership	none	panel	2001-2013
Kölling (2020a)	structural-form	conditional	long-run	firm	workers	growth	skill	panel	2004-2014
Kölling (2020b)	structural-form	conditional	long-run	firm	workers	none	skill	panel	2013-2018
Kölling (2021)	structural-form	conditional	long-run	industry	workers	ownership	family/skill	panel	2007-2014
Bossler and Popp (2022)	reduced-form	unconditional	long-run	firm/industry	workers	region	type	panel	2012-2019
Kölling (2022)	structural-form	conditional	long-run	firm	workers	none	income	panel	1996-2017
Kölling and Mertens (2022)	reduced-form	conditional	long-run	firm	workers	industry	skill	panel	2000-2017
Peichl and Popp (2022)	structural-form	(un-)conditional	long-run	firm	workers	none	skill/task	panel	1993-2016

NOTE. — The table provides an overview of empirical studies that determine and display own-wage elasticities of labor demand for the German labor market. Source: Own illustration.

Table A2: Heterogeneity and Source of Estimates

	Empirical Model	Output Decision	Instrumentation of Wage Variable	Within-Unit Variation	Time Horizon	Capital Stock	Unit of Observation	Margin of Adjustment	Firm Types	Worker Types	Data	Time	**Estimates**	Source	Step
Griffin and Gregory (1976)													**1**	Tab. 3, Col. 6	6
Franz (1977)					1			1		2				Tab. 2, Cols. (2,3)	
					1			1		2			**4**	Tab. 2, Cols. (4,5)	6
Pindyck (1979)													**1**	Tab. 4, Col. 11	1
Koellreuter (1980)					1				2					Tab. 10.2, Col. 8	
					2				4					Tab. 10.2, Cols. (9,10)	
					1				2					Tab. 10.2, Col. 11	
					2				5				**22**	Tab. 10.2, Cols. (12,13)	1
Kirkpatrick (1982)												3	**3**	Tab. 3, Cols. (2,5,8)	6
Roth (1982)													**1**	Tab. 1, Col. 4	6
Hansen (1983)									5			2	**10**	Tab. 6, Cols. (4,7,10,13,16)	5
Symons and Layard (1984)			2		2								**4**	Tabs. (1-4), Col. 2	1
Mairesse and Dormont (1985)													**1**	Tab. 6, Col. 3	1
Franz and König (1986)	1		2		1			1	1					Tab. 10, Cols. (3,5)	
	1		1		1			1	1					Page 238	
	1		1		1			2	1				**5**	Tab. 12, Col. 3	1
Nakamura (1986)									2				**2**	Tab. 3, Col. 3	6
Heise (1987)													**1**	Tab. 10, Col. 9	5
Jahnke (1987)					1									Equation 2	
					1								**2**	Page 154	6
Hart and Kawasaki (1988)								2					**2**	Tab. 1, Cols. (2,3)	1

NOTE. — The table illustrates heterogeneity and sources of the estimates in the meta-sample of wage elasticities of labor demand for the German labor market. Source: Own illustration.

Table A2: Heterogeneity and Source of Estimates (Cont.)

	Empirical Model	Output Decision	Instrumentation of Wage Variable	Within-Unit Variation	Time Horizon	Capital Stock	Unit of Observation	Margin of Adjustment	Firm Types	Worker Types	Data	Time	**Estimates**	Source	Step
König and Pohlmeier (1988)								3					**3**	Tab. 2, Col. 2	1
Stark and Jänsch (1988)									10				**10**	Tab. 7, Col. 3	2
Begg et al. (1989)													**1**	Tab. 3, Col. 4	1
Flaig and Steiner (1989)													**1**	Page 404	1
König and Pohlmeier (1989)	2		2					2					**8**	Tab. 2, Cols. (2-5)	1
Entorf and Pohlmeier (1990)													**1**	Tab. 15.1, Col. 6	6
Kraft (1991)									24				**24**	Tab. 2, Col. 5	2
Breitung (1992a)													**1**	Tab. 5, Col. 2	6
Breitung (1992b)				2	1									Tab. 5.4, Cols. (2,3)	
				1	1								**3**	Tab. 5.5, Col. 2	6
Funke (1993)													**1**	Tab. 5.4, Col. 2	6
Breitung (1994)				2	1									Tab. 2, Col. 3	
				1	1								**3**	Tab. 3, Cols. (2,3)	6
Fitzroy and Funke (1994)						2							**2**	Tabs. (2,3), Col. 3	4
Broadberry and Ritschl (1995)													**1**	Tab. 5, Equation	6
König, Buscher, and Licht (1995)									2				**2**	Tab. 2.5, Cols. (2,3)	6
Belke and Göcke (1996)	2				1							1		Tabs. (3,5), Cols. (2,3)	
	1				1							1	**3**	Tab. 4, Cols. (2,3)	6
Bauer and Zimmermann (1997)										2			**2**	Pages 290-291	3
Bellmann and Kölling (1997)									2				**2**	Tab. 1, Cols. (2,4)	6
Falk and Koebel (1997)									5	3			**15**	Tab. 4, Cols. (2-6)	4

NOTE. — The table illustrates heterogeneity and sources of the estimates in the meta-sample of wage elasticities of labor demand for the German labor market. Source: Own illustration.

Table A2: Heterogeneity and Source of Estimates (Cont.)

	Empirical Model	Output Decision	Instrumentation of Wage Variable	Within-Unit Variation	Time Horizon	Capital Stock	Unit of Observation	Margin of Adjustment	Firm Types	Worker Types	Data	Time	**Estimates**	Source	Step
Blechinger et al. (1998)													**1**	Tab. A11a, Cols. (2,3)	4
Fitzenberger and Franz (1998)									6	3			**18**	Tab. 3, Cols. (2-7)	6
Fitzroy and Funke (1998)					2				2	3			**12**	Tabs. (2-4), Cols. (2-4)	4
Koebel (1998)									29				**29**	Tab. 3, Col. 2	4
Kölling (1998)			1							1				Tab. 3.10, Col. 7	
			1							4			**5**	Tab. 3.23, Cols. (2-5)	6
Riphahn and Bauer (1998)								2					**2**	Tab. 9.1 , Cols. (2,3)	6
Rottmann and Ruschinski (1998)					1									Tab. 1, Cols. (2,3)	
					1								**2**	Tab. 2, Col. 3	4
Trabert et al. (1998)													**1**	Tab. 7, Cols. (2,3)	2
Bellmann, Bender, and Schank (1999)										6			**6**	Appendix 1 , Cols. (2-3)	4
Blechinger and Pfeiffer (1999)									2			3	**6**	Tab. 2, Cols. (2-4)	4
Buslei and Steiner (1999)								2	2	4			**16**	Tabs. (16,17) , Cols. (2-5)	2
Falk and Koebel (1999)										3			**3**	Tab. 4, Col. 2	4
Fitzenberger (1999)									6	3			**18**	Tab. 5.8 on Page 169, Cols. (2-4)	5
Funke, Maurer, and Strulik (1999)													**1**	Tab. 3, Col. 6	4
Bellmann and Schank (2000)										6			**6**	Tab. A1, Cols. (2,3)	4
Schalk and Untiedt (2000)		2											**2**	Tab. 4, Col. 3	6
Addison and Teixeira (2001)													**1**	Tab. 4, Col. 4	4
Falk and Koebel (2001)	1				2					3				Tab. 3, Cols. (2,3)	
	1				1					3			**9**	Tab. B2, Cols. (2,3)	4

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Table A2: Heterogeneity and Source of Estimates (Cont.)

	Empirical Model	Output Decision	Instrumentation of Wage Variable	Within-Unit Variation	Time Horizon	Capital Stock	Unit of Observation	Margin of Adjustment	Firm Types	Worker Types	Data	Time	**Estimates**	Source	Step
Flaig and Rottmann (2001)					1	1								Tab. 3, Col. 2	
					1	1							**2**	Tab. 3, Col. 5	4
Bauer and Riphahn (2002)					2			2					**4**	Tab. 1, Cols. (2,3)	4
Bellmann et al. (2002)									2	3			**6**	Tab. A4, Cols. (2-4)	4
Falk (2002)													**1**	Tab. G7 , Col. 2	4
Falk and Koebel (2002)										3			**3**	Tab. 5, Cols. (2-4)	4
Koebel (2002)										4			**4**	Tab. 7, Cols. (2,3)	4
Schneider et al. (2002)										4			**4**	Tab. 6.1, Cols. (2-5)	3
Barba Navaretti et al. (2003)					1				1					Tab. 2, Col. 7	
					1				1					Tab. 3, Cols. 5	
					1				2				**4**	Tab. 3, Cols. (6,7)	4
Kölling and Schank (2003)									2	3			**6**	Tabs. (4,5), Cols. (2-4)	4
Falk and Koebel (2004)									2	3			**6**	Tabs. (4,5), Cols. (2-4)	4
Addison and Teixeira (2005)		1	1	1	1		1		1		1			Tab. 1, Col. 3	
		1	2	1	1		1		1		1		**3**	Tab. 2, Col. 4	4
Becker et al. (2005)									5				**5**	Tab. 4, Cols. (2-6)	4
Cuyvers et al. (2005)					1	1			6	2				Tab. 2, Cols. (2-7)	
					1	1			6	2			**24**	Tab. 2, Cols. (2-7)	4
Bellmann and Pahnke (2006)									3	2			**6**	Tabs. (1-3), Cols. (4,7)	4
Blien, Kirchhof, and Ludewig (2006)					1				1					Tab. 3a, Col. (2,3)	4
					1				3				**4**	Tab. 5, Col. (2-7)	4

NOTE. — The table illustrates heterogeneity and sources of the estimates in the meta-sample of wage elasticities of labor demand for the German labor market. Source: Own illustration.

Table A2: Heterogeneity and Source of Estimates (Cont.)

	Empirical Model	Output Decision	Instrumentation of Wage Variable	Within-Unit Variation	Time Horizon	Capital Stock	Unit of Observation	Margin of Adjustment	Firm Types	Worker Types	Data	Time	**Estimates**	Source	Step
Koebel (2006)										3			**3**	Tab. 1, Cols. (1-3)	4
Konings and Murphy (2006)					2				3				**6**	Tabs. (4,5), Cols. (2-4)	4
Crinó (2007)			2							3			**6**	Tabs. (6,8), Cols. (2-4)	4
Lachenmaier and Rottmann (2007)									1			1		Tab. 2, Cols. (2,3)	
									4			1		Tab. (3,4), Cols. (2-5)	
									3			1	**8**	Tab. 5, Cols. (2-7)	4
Molnar, Pain, and Taglioni (2007)			2		1				1					Tab. 4, Cols. (4,6)	
			2		2				4				**18**	Tabs. (6,7), Cols. (4,6)	4
Addison et al. (2008)									2	4			**8**	Tabs. (6,7), Cols. (2-5)	4
Falk and Wolfmayr (2008)									1					Tab. 3, Col. 10	
									1				**2**	Tab. 4, Col. 5	
Jacobi and Schaffner (2008)									2	5		2	**20**	Tabs. (2,3), Cols. (3,6)	4
Agnolucci (2009)									6				**6**	Tab. 3b, Cols. (3,5,7)	6
Buscher et al. (2009)													**1**	Tab. 3, Col. 4	6
Winkler and Milberg (2009)			2										**2**	Tabs. (2,4), Col. 5	6
Brixy and Fuchs (2010)				2	1									Tab. 4, Cols. (6,7)	
				1	1								**3**	Tab. 7, Col. 6	4
Buch and Lipponer (2010)					1				1					Tab. 3, Col. 6	
					1				3					Tab. 4, Col. 2	
					1				4				**8**	Tab. 4, Col. 2	4
Freier and Steiner (2010)								2	2	8			**32**	Appendix, Cols. (2,3)	4

NOTE. — The table illustrates heterogeneity and sources of the estimates in the meta-sample of wage elasticities of labor demand for the German labor market. Source: Own illustration.

Table A2: Heterogeneity and Source of Estimates (Cont.)

	Empirical Model	Output Decision	Instrumentation of Wage Variable	Within-Unit Variation	Time Horizon	Capital Stock	Unit of Observation	Margin of Adjustment	Firm Types	Worker Types	Data	Time	**Estimates**	Source	Step
Hijzen and Swaim (2010)		2							2				**4**	Tab. 6, Cols. (4,5,8,9)	4
Mattes (2010)				2						4				Tabs. (3,5-7), Col. 8	
				1						4			**12**	Tabs. (3,5-7), Col. 8	6
Muendler and Becker (2010)								1	1					Tab. 7, Col. 3	
								2	4				**9**	Tab. 7, Cols. (4-7)	4
Bohachova et al. (2011)				1										Tab. 2, Col. 1	
				2									**3**	Tab. 2, Cols. (2,3)	4
Fauser (2011)									8				**8**	Tab. 1, Cols. (2-5)	6
Crinó (2012)										3			**3**	Tab. 5, Col. 4	4
Kölling (2012)													**1**	Tab. 3, Col. 2	4
Peichl and Siegloch (2012)										3			**3**	Tab. 1, Cols. (2-4)	4
Truett and Truett (2013)												4	**4**	Tab. A1, Col. 3	5
Cox et al. (2014)	1	1								3				Tab. B5, Col. 2	
	1	1								3				Tab. B6, Cols. (2,3)	
	1	1								2				Tab. B7, Cols. (2,4)	
	1	1								2			**10**	Tab. B8, Cols. (2,3)	5
Judzik (2014)			1						10					Tab. 4, Col. 4	
			1						9				**19**	Tab. 4, Col. 6	5
Jung (2014)	3								2				**6**	Tabs. (2-4), Cols. (2-5)	6
Bramucci (2015)				2					2	1				Tabs. (6,7), Cols. (2,3)	
				2					1	4				Tabs. (8-11), Cols. (2,3)	
				1					1	4			**16**	Tabs. (8-11), Col. 5	6

NOTE. — The table illustrates heterogeneity and sources of the estimates in the meta-sample of wage elasticities of labor demand for the German labor market. Source: Own illustration.

Table A2: Heterogeneity and Source of Estimates (Cont.)

	Empirical Model	Output Decision	Instrumentation of Wage Variable	Within-Unit Variation	Time Horizon	Capital Stock	Unit of Observation	Margin of Adjustment	Firm Types	Worker Types	Data	Time	**Estimates**	Source	Step
Seo, Kim, and Lee (2015)									2				**2**	Tab. 2, Col. 5	5
Herwartz and Niebuhr (2017)													**1**	Tab. 2, Cols. (2,3)	5
Lichter, Peichl, and Siegloch (2017)	2	1	1	1	1	1			2	1				Tab. 3, Cols. (3,5)	
	1	1	1	1	1	1			2	3				Tab. 5, Cols. (3,5,7)	
	1	1	1	1	1	1			2	4			**18**	Tab. 6, Cols. (2,3)	6
Kölling (2017)	6												**6**	Tabs. (A8-A13), Col. 5	5
Kölling (2018)	2									3			**6**	Tab. 5, Cols. (2-4)	5
Kölling (2019)									6				**6**	Tab. 7, Cols. (2-4)	5
Kölling (2020a)									6				**6**	Tab. 3, Cols. (2-4)	5
Kölling (2020b)			2							3		3	**18**	Tab. 1, Cols. (2-4)	5
Kölling (2021)			2						2	6			**24**	Tab. 1, Col. (2-7)	5
Bossler and Popp (2022)			1				1		1	1				Tab. 2, Col. 2	
			1				1		1	2				Tab. 8, Col. (2,3)	
			1				1		1	2				Page 33	
			1				1		2	1			**7**	Tab. 7, Col. (2,3)	5
Kölling (2022)	2									3			**6**	Tab. 3, Col. 2	5
Kölling and Mertens (2022)									2	3			**6**	Tabs. (4,5), Cols. (2-4)	5
Peichl and Popp (2022)		2								3				Tabs. (2,3), Cols. (3-5)	
		2								5			**16**	Tabs. (5,6), Cols. (3-7)	5

NOTE. — The table illustrates heterogeneity and sources of the estimates in the meta-sample of wage elasticities of labor demand for the German labor market. Source: Own illustration.

Table A3: Attributes of Meta-Sample

	(1) Full Sample	(2) Baseline Sample	(3) Structural-Form Models	(4) Reduced-Form Models
Empirical Model				
Structural-Form Model	0.573	0.577	1.000	0.000
Reduced-Form Model	0.427	0.423	0.000	1.000
Output Decision				
Conditional	0.922	0.912	0.980	0.844
Unconditional	0.078	0.088	0.020	0.156
Instrumentation of Wage Variable				
Without Instrumental Variable	0.753	0.810	0.817	0.668
With Instrumental Variable	0.247	0.190	0.183	0.332
Within-Unit Variation				
Without Unit Fixed Effects	0.403	0.324	0.463	0.322
With Unit Fixed Effects	0.597	0.676	0.537	0.678
Time Horizon				
Short-Run	0.216	0.192	0.007	0.495
Medium-Run	0.342	0.373	0.460	0.183
Long-Run	0.443	0.434	0.532	0.322
Capital Stock				
Quasi-Fixed	0.400	0.462	0.468	0.309
Flexible	0.379	0.339	0.490	0.229
None	0.221	0.199	0.042	0.462
Unit of Observation				
Firm	0.356	0.357	0.347	0.369
Industry or Region	0.620	0.613	0.644	0.588
Economy	0.024	0.029	0.010	0.043
Margin of Adjustment				
Worker	0.817	0.826	0.777	0.870
Hours per Worker	0.014	0.000	0.025	0.000
Overall Hours	0.162	0.172	0.188	0.126
Not Stated	0.007	0.002	0.010	0.003
Industry				
Overall	0.433	0.511	0.465	0.389
Non-Manufacturing	0.109	0.109	0.116	0.100
Manufacturing	0.458	0.380	0.418	0.512
Region				
Overall	0.447	0.432	0.399	0.512
West Germany	0.488	0.473	0.530	0.432
East Germany	0.065	0.095	0.072	0.056
Open Economy				
Overall	0.870	0.903	0.886	0.847
Non-Exporting or National Firm	0.017	0.023	0.010	0.027
Exporting or Multinational Firm	0.113	0.075	0.104	0.126
Skill Level				
Overall	0.601	0.507	0.433	0.827
Low-Skilled	0.148	0.172	0.213	0.060
Medium-Skilled	0.112	0.149	0.156	0.053
High-Skilled	0.112	0.149	0.156	0.053
Medium- or High-Skilled	0.027	0.023	0.042	0.007

Note. — The table displays the shares of different attributes in the meta-sample of estimated own-wage elasticities of labor demand. The baseline sample refers to all estimates with reported or calculable standard errors. Source: Own illustration.

Table A3: Attributes of Meta-Sample (Cont.)

	(1) Full Sample	(2) Baseline Sample	(3) Structural-Form Models	(4) Reduced-Form Models
Job Type				
Overall	0.848	0.792	0.780	0.940
White-Collar	0.115	0.152	0.161	0.053
Blue-Collar	0.037	0.057	0.059	0.007
Contract Type				
Overall	0.848	0.792	0.780	0.940
Typical Employment	0.115	0.152	0.161	0.053
Atypical Employment	0.037	0.057	0.059	0.007
Gender				
Overall	0.895	0.878	0.827	0.987
Male	0.062	0.081	0.104	0.007
Female	0.043	0.041	0.069	0.007
Data				
Time Series	0.214	0.174	0.203	0.229
Cross Section	0.048	0.061	0.072	0.017
Panel	0.738	0.765	0.725	0.754
Years				
Centralized Year in Data	1993	1995	1993	1992
Year of Publication	2004	2007	2006	2003
Publication Format				
Refereed Article	0.533	0.482	0.557	0.502
Non-Refereed Article	0.332	0.407	0.300	0.375
Book or Collection	0.135	0.111	0.144	0.123
Estimates With Standard Error	Yes	Yes	Yes	Yes
Estimates Without Standard Error	Yes	No	Yes	Yes
Number of Observations	705	442	404	301
Number of Studies	105	73	47	61

NOTE. — The table displays the averages of different attributes in the meta-sample of estimated own-wage elasticities of labor demand. The baseline sample refers to all estimates with reported or calculable standard errors. Source: Own illustration.

B Meta-Regression Analysis: Further Evidence

Table B1: Sensitivity Analysis

Dependent Variable: Own-Wage Elasticity of Labor Demand	(1) **WLS Quadratic Trend for Year in Data**	(2) **WLS Linear Trend for Year of Publication**	(3) **WLS Only p < 0.1**	(4) **WLS Study Weights**	(5) **Meta Random Effects**
Empirical Model					
Structural-Form Model	Reference	Reference	Reference	Reference	Reference
Reduced-Form Model	0.096 (0.129)	0.145 (0.132)	0.015 (0.174)	0.066 (0.087)	-0.025 (0.093)
Output Decision					
Conditional	Reference	Reference	Reference	Reference	Reference
Unconditional	-0.419 (0.079)***	-0.038 (0.115)	-0.334 (0.094)***	-0.207 (0.103)**	-0.292 (0.087)***
Instrumentation of Wage Variable					
Without Instrumental Variable	Reference	Reference	Reference	Reference	Reference
With Instrumental Variable	-0.406 (0.084)***	-0.239 (0.075)***	-0.344 (0.085)***	-0.189 (0.093)**	-0.198 (0.053)***
Within-Unit Variation					
Without Unit Fixed Effects	Reference	Reference	Reference	Reference	Reference
With Unit Fixed Effects	-0.054 (0.029)*	-0.094 (0.042)**	-0.071 (0.030)**	-0.025 (0.079)	-0.044 (0.066)
Time Horizon					
Short-Run	Reference	Reference	Reference	Reference	Reference
Medium-Run	-0.229 (0.105)**	-0.302 (0.095)***	-0.414 (0.246)*	-0.257 (0.091)***	-0.085 (0.091)
Long-Run	-0.235 (0.094)**	-0.220 (0.063)***	-0.226 (0.104)**	-0.257 (0.094)***	-0.219 (0.074)***
Capital Stock					
Quasi-Fixed	Reference	Reference	Reference	Reference	Reference
Flexible	0.294 (0.140)**	0.189 (0.089)**	0.221 (0.194)	-0.193 (0.107)*	-0.193 (0.107)*
None	-0.050 (0.123)	-0.101 (0.058)*	-0.001 (0.200)	-0.139 (0.118)	0.134 (0.106)
Unit of Observation					
Firm	Reference	Reference	Reference	Reference	Reference
Industry or Region	0.202 (0.084)**	0.018 (0.118)	0.196 (0.144)	-0.015 (0.072)	0.093 (0.067)
Economy	-2.711 (1.205)**	-0.035 (0.134)	3.325 (0.687)***	-0.006 (0.167)	1.370 (3.184)
⋮	⋮	⋮	⋮	⋮	⋮

Table B1: Sensitivity Analysis (Cont.)

Dependent Variable: Own-Wage Elasticity of Labor Demand	**(1)** **WLS** **Quadratic Trend for Year in Data**	**(2)** **WLS** **Linear Trend for Year of Publication**	**(3)** **WLS** **Only p < 0.1**	**(4)** **WLS** **Study Weights**	**(5)** **Meta** **Random Effects**
⋮	⋮	⋮	⋮	⋮	⋮
Margin of Adjustment					
Workers	Reference	Reference	Reference	Reference	Reference
Hours per Worker	Omitted	Omitted	Omitted	0.126 (0.123)	Omitted
Overall Hours	-0.039 (0.065)	-0.173 (0.079)**	-0.037 (0.062)	-0.138 (0.085)	-0.166 (0.063)***
Not Stated	Omitted	Omitted	Omitted	0.103 (0.200)	Omitted
Industry					
Overall	Reference	Reference	Reference	Reference	Reference
Non-Manufacturing	0.094 (0.094)	-0.023 (0.106)	0.082 (0.137)	-0.181 (0.092)*	-0.078 (0.074)
Manufacturing	0.018 (0.096)	-0.135 (0.112)	-0.007 (0.136)	-0.168 (0.076)**	-0.115 (0.058)**
Region					
Overall	Reference	Reference	Reference	Reference	Reference
West Germany	0.025 (0.100)	0.009 (0.056)	-0.124 (0.104)	0.150 (0.071)**	0.199 (0.075)***
East Germany	0.020 (0.102)	0.003 (0.058)	-0.124 (0.111)	-0.058 (0.114)	0.184 (0.082)**
Open Economy					
Overall	Reference	Reference	Reference	Reference	Reference
Non-Exporting or National Firm	0.374 (0.173)**	0.097 (0.139)	0.664 (0.294)**	-0.103 (0.207)	0.117 (0.160)
Exporting or Multinational Firm	0.165 (0.155)	-0.103 (0.120)	0.079 (0.179)	-0.240 (0.127)*	-0.179 (0.093)*
Skill Level					
Overall	Reference	Reference	Reference	Reference	Reference
Low-Skilled	-0.111 (0.039)***	-0.142 (0.062)**	-0.111 (0.044)**	-0.188 (0.110)*	-0.111 (0.059)*
Medium-Skilled	-0.002 (0.059)	-0.110 (0.076)	-0.002 (0.062)	0.118 (0.087)	0.112 (0.059)*
High-Skilled	-0.182 (0.079)**	-0.351 (0.097)***	-0.186 (0.083)**	0.093 (0.094)	-0.047 (0.061)
Medium- or High-Skilled	0.039 (0.059)	-0.167 (0.113)	-0.097 (0.131)	0.308 (0.114)***	0.070 (0.114)
⋮	⋮	⋮	⋮	⋮	⋮

Table B1: Sensitivity Analysis (Cont.)

Dependent Variable: Own-Wage Elasticity of Labor Demand	(1) **WLS Quadratic Trend for Year in Data**	(2) **WLS Linear Trend for Year of Publication**	(3) **WLS Only p < 0.1**	(4) **WLS Study Weights**	(5) **Meta Random Effects**
⋮	⋮	⋮	⋮	⋮	⋮
Job Type					
Overall	Reference	Reference	Reference	Reference	Reference
White-Collar	-0.045 (0.089)	0.125 (0.107)	-0.237 (0.191)	0.216 (0.115)*	0.027 (0.113)
Blue-Collar	0.033 (0.089)	0.009 (0.116)	0.012 (0.142)	-0.041 (0.131)	-0.065 (0.099)
Contract Type					
Overall	Reference	Reference	Reference	Reference	Reference
Typical Employment	-0.142 (0.113)	0.335 (0.132)**	0.234 (0.175)	-0.282 (0.101)***	-0.032 (0.105)
Atypical Employment	-0.445 (0.181)**	-0.126 (0.213)	-0.139 (0.221)	-0.173 (0.184)	-0.248 (0.136)*
Gender					
Overall	Reference	Reference	Reference	Reference	Reference
Male	0.239 (0.213)	-0.397 (0.135)***	0.088 (0.286)	0.043 (0.208)	-0.262 (0.158)*
Female	0.248 (0.209)	-0.259 (0.144)*	0.082 (0.279)	0.215 (0.165)	-0.306 (0.169)*
Data					
Time Series	Reference	Reference	Reference	Reference	Reference
Cross Section	0.250 (0.166)	0.369 (0.186)**	0.099 (0.207)	0.063 (0.171)	0.371 (0.175)**
Panel	0.295 (0.197)	0.162 (0.083)*	0.140 (0.297)	0.309 (0.076)***	0.489 (0.135)***
Years					
Centralized Year in Data	-6.415 (1.536)***	-0.020 (0.011)*	0.029 (0.013)**	-0.008 (0.005)	-0.001 (0.008)
Squared Centralized Year in Data	0.002 (0.000)***	No	No	No	No
Year of Publication (Fixed Effects)	Yes	0.012 (0.006)*	Yes	Yes	Yes
Constant	6354.8 (1524.7)***	14.82 (13.29)	-60.47 (26.69)**	15.95 (10.52)	0.679 (16.01)
Estimator	WLS	WLS	WLS	WLS	RE-Meta
Sample	Baseline	Baseline	Only p Value < 0.1	Full	Baseline
Weight	Inverse Variance	Inverse Variance	Inverse Variance	Inverse Study's N	Inverse Variance
Number of Observations	442	442	352	705	442
Number of Studies	73	73	67	105	73
Adjusted R^2	0.950	0.916	0.930	0.289	.

NOTE. — The table shows meta-regressions for own-wage elasticities of labor demand from Germany. The baseline sample refers to all estimates with reported or calculable standard errors. Standard errors (in parentheses) are clustered at the study level. RE-Meta = Random-Effects Meta-Regression. WLS = Weighted Least Squares. * = p<0.10. ** = p<0.05. *** = p<0.01. Source: Own illustration.

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