Employment effects of reduced non-wage labour costs

Annexes 1–7

Disclaimer: These annexes have not been subject to the full Eurofound editorial and publication process.

This report is available in electronic format only.

Wyattville Road, Loughlinstown, Dublin 18, Ireland, D18 KP65 – Tel: (+353 1) 203 31 00 – Fax: 282 64 56 Email: **information@eurofound.europa.eu** – website: **www.eurofound.europa.eu**

Contents

Annex 1: List of evaluations

Anastasia, B., Giraldo, A. and Paggiaro, A. (2013), 'L'effetto degli incentivi alle assunzioni e alle trasformazioni. Prime evidenze per il Veneto', *Politica Economica*, Vol. XXIX, No. 2, pp. 181–198.

Anspal, S., Järve, J., Jääts, K., Kallaste, E., Maar, K., Mägi, A. and Toots, A. (2013), *Programmi 'Kvalifitseeritud tööjõu pakkumise suurendamine 2007–2013' teenuste hindamine*, InterAct Projektid & Koolitus OÜ, Centar.

Antón, A. (2014), 'The effect of payroll taxes on employment and wages under high labour informality', *IZA Journal of Labor & Development*, Vol. 3, No. 20, available at http://www.izajold.com/content/3/1/20.

Arranz, J. M., García Serrano, C. and Hernanz, V. (2013), 'Evaluación macroeconómica de las políticas activas del mercado de trabajo en España: ¿Mucho ruido y pocas nueces?', *Revista Internacional Del Trabajo*, Vol. 132, No. 2, pp. 367–390, available at http://doi.org/10.1111/j.1564-9148.2013.00185.x.

Atanasov, A. (2015), *Performing post evaluation of the effect of labour market active policy at the individual level*, Report for the Ministry of Labour and Social Policy.

Aumayr, C., Blien, U., Dauth, W., Hujer, R., Janisch, D., Kernitzkyi, M., Woitech, B. (2009). Makroökonomische Effekte Der Aktiven Arbeitsmarktpolitik In Österreich 2001-2007.

Ayhan, S. H. (2013), 'Do non-wage cost rigidities slow down employment ? Evidence from Turkey', *IZA Journal of Labour Policy*, Vol. 2, No. 20, available at http://www.izajolp.com/content/2/1/20.

Balkan, B., Soner, Y. and Semih, K. (2014), *Evaluating the impact of the post-2008 Employment Subsidy Program in Turkey*, Working Paper 14/14, Central Bank of the Republic of Turkey.

Bennmarker, H., Mellander, E. and Öckert, B. (2009), 'Do regional payroll tax reductions boost employment?', *Labour Economics*, Vol. 16, No. 5, pp. 480–489, available at http://doi.org/10.1016/j.labeco.2009.04.003.

Bernhard, S., Gartner, H. and Gesine, S. (2008), *Wage subsidies for needy job-seekers and their effect on individual labour market outcomes after the German reforms*, IAB Discussion Paper, 21(3772).

Betcherman, G., Daysal, N. M., & Pagés, C. (2010). Do employment subsidies work? Evidence from regionally targeted subsidies in Turkey. Labour Economics, 17(4), 710–722. http://doi.org/10.1016/j.labeco.2009.12.002

Boockmann, B., Zwick, T., Ammermüller, A. and Maier, M. (2012), 'Do hiring subsidies reduce unemployment among older workers? Evidence from natural experiments', *Journal of the European Economic Association*, Vol. 10, No. 4, pp. 735–764, available at http://doi.org/10.1111/j.1542-4774.2012.01070.x.

Bucher, A. (2010), 'Impacts of hiring subsidies targeted at the long-term unemployed on the low-skilled labour market: The French experience', *Economic Modelling*, Vol. 2, No. 2, pp. 553–565, available at http://doi.org/10.1016/j.econmod.2009.11.010.

Bunel, M., Emond, C. and L'Horty, Y. (2012), 'Évaluer les réformes des exonérations générales de cotisations cociales', *Revue de l'OFCE*, Vol. 7, No. 126, pp. 57–103, available at http://doi.org/10.3917/reof.126.0057.

Bunel, M. and L'Horty, Y. (2012), 'The effects of reduced SSC on employment: An evaluation of the 2003 French reform', *Fiscal Studies*, Vol. 33, No. 3, pp. 371–398.

Büttner, T., Schewe, T. and Stephan, G. (2015), *Measures under scrutiny: The effectiveness of active labour market policy instruments in Germany*, IAB Brief Report 8/2015.

Cahuc, P. and Barbanchon, T. (2014), *Do hiring credits work in recessions? Evidence from France*, IZA DP No. 8330.

Caliendo, M. and Schmidl, R. (2011), *Fighting youth unemployment: The effects of active labour market policies*, IZA DP No. 6222.

Cebrián, I., Moreno, G. and Toharia, L. (2011), 'La estabilidad laboral y los programas de fomento de la contratación indefinida', *Hacienda Pública Española/ Revista de Economía Publica*, 198-(3/2011), pp. 103–127.

Ciani, E. and de Blasio, G. (2015), 'Getting stable: An evaluation of the incentives for permanent contracts in Italy', *IZA Journal of European Labour Studies*, Vol. 4, No. 1, available at http://doi.org/10.1186/s40174-015-0030-5

Cilasun, S. M., Acar, E. O. and Gunalp, B. (2015), *The effects of labour market reforms on the labour market dynamics in Turkey*, MPRA Paper No. 64767.

Cipollone, P. and Guelfi, A. (2003), *Tax credit policy and firms' behaviour: The case of subsidies to open-end labour contracts in Italy*, Temi di Discussione No. 471, Banca d'Italia.

Cockx, B. and Göbel, C. (2004), *Subsidized employment for young long-term unemployed workers – An evaluation*.

Conde-Ruiz, J. I., Felgueroso, F. and García Pérez, J. I. (2010), *Las reformas laborales en España: Un modelo agotado*, Estudios Económicos 11-2010, FEDEA.

Costabella, L. M. and Battiloro, V. (2011), 'Incentivi o misure di attivazione ? Evidenze sull ' efficacia di due interventi per contrastare il lavoro precario', *Politica Economica*, pp. 197–218.

Costa Dias, M. and Varejão, J. (2012), *Estudo de avaliação das políticas ativas de emprego: Relatório final*, School of Economics and Management, University of Porto, available at http://www.portugal.gov.pt/media/724767/20121003_estudo_avaliacao_politicas_ativas_emprego.pdf.

Cottet, V., Quantin, S. and Régnier, V. (2012), *Coût du travail et allègements de charges: Une estimation au niveau établissement de 1996 à 2008*, Document de Travail G2012/12, Institut National de la Statistique et des Études Économiques .

COWI (2012), *Analyse af jobrotation i nordjylland*, Kongens Lyngby.

Crépon, B. and Desplatz, R. (2002), *Evaluation of the effects of payroll tax subsidies for low wage workers*, Centre de Recherche en Économie et Statistique.

Cruces, G., Galiani, S. and Kidyba, S. (2010), 'Payroll taxes, wages and employment: Identification through policy changes', *Labour Economics*, Vol. 17, No. 4, pp. 743–749, available at http://doi.org/10.1016/j.labeco.2009.11.004.

Cseres-Gergely, Z. Scharle, A. and Földessy, A. (2015), *Evaluating the impact of a well-targeted wage subsidy using administrative data*, Budapest Working Papers on the Labour Market, BWP – 2015/3, Institute of Economics, Hungarian Academy of Sciences.

Csoba J. and Nagy, Z. E. (2012), 'The evaluation of training, wage subsidy and public works programs in Hungary', in Fazekas, K. and Kézdi, G. (eds), *The Hungarian labour market, 2012. In focus: The evaluation of active labour market programs*, Research Centre for Economic and Regional Studies, Budapest.

Datta Gupta, N., Larsen, M. and Thomsen, L. S. (2015), 'Do wage subsidies for disabled workers reduce their non-employment? Evidence from the Danish Flexjob scheme', IZA Journal of Labour Policy, Vol. 4, No. 1, available at http://doi.org/10.1186/s40173-015-0036-7.

Deloitte (2013), *Evaluering af voksenlærlingeordningen: Effekter, anvendelse og incitamenter*, Styrelsen for Arbejdsmarked og Rekruttering, Copenhagen.

Egebark, J. and Kaunitz, N. (2014), *Do payroll tax cuts raise youth employment?*, IFN Working Paper, 1001.

Elias, F. (2014), *The effects of employment tax credits: Evidence from Spain*, Columbia Business School.

Eppel, R. and Mahringer, H. (2013), *Do wage subsidies work in boosting economic inclusion? Evidence on effect heterogeneity in Austria*, WIFO Working Paper 456, WIFO, Vienna.

Eppel, R., Mahringer, H., Weber, A. amd Zulehner, C. (2011), *Evaluierung der Eingliederungsbeihilfe*, WIFO, Vienna.

Fondazione Giacomo Brodolini (2015), *Evaluating the impact of hiring incentives in Italy*, VS/2014/0067.

Forslund, A., Johansson, P. and Lindqvist, L. (2004), *Employment subsidies – A fast lane from unemployment to work?*, IFAU Working Paper 18.

Frey, M. (2008), 'Evaluation of active labour market programmes between 2001–2006 and the main changes in 2007', in *The Hungarian labour market: Review and analysis 2008*, Institute of Economics, HAS, Hungarian Employment Foundation, Budapest.

García-Pérez, I. and Rebollo-Sanz, Y. (2009), 'Do wage subsidies affect the subsequent employment stability of permanent workers? The case of Spain', *Investigaciones Econòmicas*, Vol. 33, No. 1, pp. 97–130.

Goos, M. and Konings, J. (2007), *The impact of payroll tax reductions on employment and wages: A natural experiment using firm level data*, LICOS Discussion Paper 178/2007.

Groh, M., Krishnan, N., McKenzie, D. and Vishwanath, T. (2012), *Soft skills or hard cash ? The impact of training and wage subsidy programs on female youth employment in Jordan*, Policy Research Working Paper Series July 2012, available at http://ideas.repec.org/p/wbk/wbrwps/6141.html.

Gruber, J. (1997), 'The incidence of payroll taxation: Evidence from Chile', *Journal of Labour Economics*, Vol. 15.

Hamersma, S. (2008), 'The effects of an employer subsidy on employment outcomes: A study of the work opportunity and welfare-to-work tax credits', *Journal of Policy Analysis and Management*, Vol. 27, No. 3, pp. 498–520, available at http://doi.org/10.1002/pam.20354.

Heyer, É. and Plane, M. (2013), 'Impact des exonérations de cotisations sur l'emploi', *L'économie Française 2014*, available at http://ses.ens-lyon.fr/articles/impact-des-exonerations-de-cotisations-sur-l-emploi-2533733.

Hofer, H. and Weber, A. (2006), Active Labour Market Policy in Austria: practice and evaluation results, Vierteljahrshefte zur Wirtschaftsforschung 75 (2006), 3, S. 155–167.

Huttunen, K., Pirttilä, J. and Uusitalo, R. (2013), 'The employment effects of low-wage subsidies', *Journal of Public Economics*, Vol. 97, No. 1, pp. 49–60, http://doi.org/10.1016/j.jpubeco.2012.09.007.

Jaenichen, U. and Stephan, G. (2011), 'The effectiveness of targeted wage subsidies for hard-to-place workers', *Applied Economics*, Vol. 43, No. 10, pp. 1209–1225, available at http://doi.org/10.1080/00036840802600426.

Jespersen, S. T., Munch, J. R. and Skipper, L. (2008), 'Costs and benefits of Danish active labour market programmes', *Labour Economics*, Vol. 15, No. 5, pp. 859–884, available at http://doi.org/10.1016/j.labeco.2007.07.005.

Kangasharju, A. (2007), 'Do wage subsidies increase employment in subsidized firms?', *Economica*, Vol. 74, available at http://doi.org/10.1111/j.1468-0335.2006.00525.x.

Kangasharju, A. and Venetoklis, T. (2003), *Do wage subsidies increase employment in firms?*, VATT Discussion Paper No. 304.

Koch, V. S. and Kvasnicka, M. (2010), *Beschäftigungszuschuss im SGB II: Ein neues Instrument als Ultima Ratio*, IAB-Kurzbericht, 2/2010.

Korkeamäki, O. (2011), *The Finnish payroll tax cut experiment revisited*, VATT Working Paper No. 22.

Korkeamäki, O. and Uusitalo, R. (2009), 'Employment and wage effects of a payroll-tax cut-evidence from a regional experiment', *International Tax and Public Finance*, Vol. 16, No. 6, pp. 753–772, available at http://doi.org/10.1007/s10797-008-9088-6.

Kramarz, F. and Philippon, T. (2001), The impact of differential payroll tax subsidies on minimum wage employment, *Journal of Public Economics*, Vol. 82, No. 1, pp. 115–146, available at http://doi.org/10.1016/S0047-2727(00)00137-7.

Kugler, A. and Kugler, M. (2003), *The labour market effects of payroll taxes in a middle-income country: Evidence from Colombia*, Discussion Papers in Economics and Econometrics 0306, University of Southampton, available at http://eprints.soton.ac.uk/33492/.

Lalive, R., Wuellrich, J. P. and Zweimüller, J. (2013), Do financial incentives affect firms' demand for disabled workers?', *Journal of the European Economic Association*, Vol. 11, No. 1, pp. 25–58, available at http://doi.org/10.1111/j.1542-4774.2012.01109.x.

Laun, L. (2012), *The effect of age-targeted tax credits on retirement behavior*, IFAU Working Paper 2012-18.

Levinsohn, J., Rankin, N., Roberts, G. and Schöer, V. (2014), *Wage subsidies and youth Employment in South Africa: Evidence from a randomised control trial*, Stellenbosh Economic Working Papers 02/14, available at http://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/meetingdocument/wcms_237088.pdf.

López-Novella, M. (2003), *Effets de certains subsides temporaires a l'embauche: Une analyse*, Bureau Federal du Plan Working Paper 16-03.

Lutz, H., Mahringer, H. and Pöschl, A. (2005*), Evaluierung der österreichischen Arbeitsmarktförderung 2000–2003*, WIFO, Vienna.

Månsson, J. and Quoreshi, A. (2015). Evaluating regional cuts in the pay-roll tax from a firm perspective. The Annals of Regional Science, 1–30. http://doi.org/10.1007/s00168-015-0656-2

Marlow, S., Hillmore, A., Ainsworth, P. (2012), "Impacts and costs and benefits of the future jobs fund", UK Dept of Work and Pensions working paper.

Mazzarella, G., Rettore, E., Trivellato, U. and Zanini, N. (2014), 'The effect of a mixed passive and active labour market policy: Evidence from an Italian programme for dismissed workers', *Rassegna Italiana di Valutazione*, No. 58, pp. 80–101.

Mihaylov, E. (2009), *Evaluation of subsidized employment programs for long-term unemployment in Bulgaria: A matching approach*, NETSPAR Master Thesis.

Moczall, A. (2013), *Subsidies for substitutes? New evidence on deadweight loss and substitution effects of a wage subsidy for a hard-to-place job-seekers*, IAB Discussion Paper No. 5/2013.

Mojsoska-Blazevski, N. and Petreski, M. (2015), *Impact evaluation of active labour market programs in FYR Macedonia: Key findings*, International Labour Organization.

Neubäumer, R. (2012), 'Bringing the unemployed back to work in Germany: Training programs or wage subsidies?', *International Journal of Manpower*, Vol. 33, No. 2, pp. 159–177, available at http://doi.org/10.1108/01437721211225417.

O' Leary, C. J. (1998), *Evaluating the effectiveness of active labour programs in Hungary*, Upjohn Institute Technical Report 98-012.

OAED (2008), *Evaluation of the New Jobs for the Unemployed Programme OF 2005*, Athens.

OAED, (2013), *Evaluation of the new active labour market policy program. Final report*, Athens

Okunevičiūtė, L. (2007), "Aktyvios Darbo Rinkos Politikos Priemonių Efektyvumo Tyrimas, IV-Ojo Mokslinio Tyrimo Etapo Ataskaita" (assessment of actie labour market policies in Lithuania)

ONEM (2013), *Activation et formation des chômeurs. Eléments d'evaluation d'un certain nombre de mesures de l'ONEM*, Brussels.

Paggiaro, A. and Trivellato, U. (2002), 'Assessing the effects of the 'mobility lists' programme by flexible duration models', *Labour*, Vol. 16, No. 2, pp. 235–266.

Pirttilä, J. and Selin, H. (2011), *Tax policy and employment: How does the Swedish system fare?*, CESifo Working Paper No. 3355, Munich.

Plane, M. (2012), 'Évaluation de l'impact économique du crédit d'impôt pour la compétitivité et l'emploi (CICE)', *Revue de l'OFCE*, Vol. 126, No. 7, available at http://doi.org/10.3917/reof.126.0141.

Pons-Rotger, G. and Neilsen Arendt, J. (2010), *The effect of a wage subsidy on employment in the subsidised firm*, Anvendt KommunalForskning, Copenhagen.

Rettore, E., Paggiaro, A. and Trivellato, U. (2008), *The effect of extending the duration of eligibility in an Italian labour market programme for dismissed workers*, IZA Discussion Paper No. 3633.

Rodríguez-Planas, N. and Jacob, B. (2010), 'Evaluating active labour market programs in Romania', *Empirical Economics*, Vol. 38, No. 1, pp. 65–84.

Scherer, C. (2015), *Payroll tax reduction in Brazil: Effects on employment and wages*. Working Paper No. 602, International Institute of Social Studies, The Hague.

Schünemann, B., Lechner, M. and Wunsch, C. (2013), Do long-term unemployed workers benefit from targeted wage subsidies?', *German Economic Review*, Vol. 16, No. 1, pp. 43–64, available at http://doi.org/10.1111/geer.12040.

Sianesi, B. (2004), An Evaluation of the Swedish System of Active Labour Market Programs in the 1990s. Review of Economics and Statistics, Vol. 86, No. 1, pp. 133–155. http://doi.org/10.1162/003465304323023723

Sjögren, A. and Vikström, J. (2015), 'How long and how much? Learning about the design of wage subsidies from policy changes and discontinuities', *Labour Economics*, Vol. 34, pp.127–137, available at http://doi.org/10.1016/j.labeco.2015.03.009.

Skedinger, P. (2014), *Effects of payroll tax cuts for young workers*, IFN Working Paper No. 1031.

Slonimczyk, F. (2011). The Effect of Taxation on Informal Employment: Evidence from the Russian Flat Tax Reform: Working paper WP3/2011/05 [Text]/F. *Moscow: Publishing House of the Higher School of Economics*

Sørensen, K. K. and Arendt, J. N. (2014), Effects on employment as job rotation agency, KORA Report.

NVA (2013), (Latvian State Employment Agency), *NVA nodarbinātības pasākumu novērtējums* (assessment of NVA employment policies).

Steinwender, C. (2010), *Job creation subsidies and employment: Empirical evidence for Germany*.

Stokke, H. E. (2015), *Regional payroll tax cuts and individual wages: Heterogeneous effects across sectors and education levels*, Working Paper No. 16815, Department of Economics, Norwegian University of Science and Technology.

Vall Castello, J. (2012), 'Promoting employment of disabled women in Spain; Evaluating a policy'. *Labour Economics*, Vol. 19, No. 1, pp. 82–91, available at http://doi.org/10.1016/j.labeco.2011.08.003.

Van der Geest, L. and Heuts, L. (2005), *Een opstapkorting voor werkzoekenden*, NYFER, Breukelen, the Netherlands.

Walterskirchen, E., Huber, P., Lehner, G. and Weber, A. (2000), ‚Möglichkeiten Und Auswirkungen Einer Senkung Der Lohnnebenkosten', *Arbeitsmarktpolitik*, Monatsberichte 2/2000, WIFO, pp. 113–122.

Welters, M. and Muysken, J. (2004), 'Zoekgedrag werkgevers bepaalt effectiviteit loonkostensubsidies', *Economisch Statistische Berichten* (*ESB*), Vol. 89, No. 4440, pp. 386–389.

Wiśniewski, Z., Dolny, E., Jaskólska, B., Maksim, M., Śliwicki, D., Wojdyło-Preisner, M. and Zawadzki, K. (2011), *Efektywność aktywnej polityki rynku pracy w świetle badań empirycznych*, Nicolaus Copernicus University, Toruń.

Wuellrich, J. P. (2010), 'The effects of increasing financial incentives for firms to promote employment of disabled workers', *Economics Letters*, Vol. 107, No. 2, pp. 173–176, available at http://doi.org/10.1016/j.econlet.2010.01.016.

Annex 2: List of evaluations considered and not considered for the meta-analysis

Country	Study (chronological order)	Evaluated policy/reform	Targeted	Type of evaluation	Meta-analysis
Austria	Walterskirchen et al (2000)	Non-wage labour costs reduction	No	Simulation with macro model	No
	Lutz et al (2005)	ALMP (including integration subsidy)	No	Microeconometric – matching	Yes
	Hofer and Weber (2006)	ALMP	No	Descriptive	No
	Aumayr et al (2009)	ALMP	No	Descriptive	No
	Wuellrich (2010)	Financial incentives to hire disabled workers	Yes	Macroeconometric	Yes
	Eppel et al. (2011)	Integration subsidy	Yes	Microeconometric – matching	Yes
	Eppel and Mahringer (2013)	Wage subsidies	Yes	Microeconometric – matching	Yes
	Lalive et al (2013)	Financial incentives to hire disabled workers	Yes	RDD	Yes
Belgium	López-Novella (2003)	Employment subsidies	Yes	Microeconometric – duration models	Yes
	Cock and Goebel (2004)	Reduction in social insurance contributions for young long-term unemployed	Yes	Microeconometric – duration models	Yes
	Goos and Konnings (2007)	Payroll tax reductions	Yes	Microeconometric – D-i-D firm data	Yes
	ONEM (2013)	ALMP	Yes	Microeconometric – matching	Yes
Bulgaria	Mihaylov (2009)	Subsidised employment programs for long-term unemployment	Yes	Microeconometric – matching	Yes
	Atanasov (2015)	ALMP	Yes	Microeconometric – matching	No
Denmark	Jespersen et al (2008)	ALMP	Yes	Microeconometric – matching	Yes
	Pons-Rotger and Nielsen Arendt (2010)	Wage subsidy	Yes	Microeconometric – matching	Yes
	Cowi (2012)	Temporary employment agencies and subsidised jobs	Yes	Microeconometric – matching	No
	Deloitte (2013)	Apprenticeship scheme including employment subsidies	No	Microeconometric – matching	Yes
	Sørensen et al. (2014)	Job rotation scheme (no wage subsidies)	Yes	Microeconometric – matching	Yes
	Kora (2014)	Job rotation scheme (no wage subsidies)	Yes	Microeconometric – matching	Yes
	Datta-Gupta et al (2015)	Wage subsidies for disabled workers	Yes	Microeconometric – D-i-D	Yes

Country	Study (chronological order)	Evaluated policy/reform	Targeted	Type of evaluation	Meta-analysis
Estonia	Anspal et al. (2012)	Training and wage subsidies	Yes	Microeconometric – matching	Yes
Finland	Kangasharju and Venetoklis (2003)	Wage subsidies	Yes	Microeconometric – D-i-D firms	Yes
	Kangasharju (2007)	Wage subsidies	Yes	Microeconometric – D-i-D + matching	Yes
	Korkeamäki and Uusitalo (2009)	Payroll tax reductions	No	Macroeconometric – D-i-D	Yes
	Korkeamäki (2011)	Payroll tax reductions	No	Macroeconometric – D-i-D	Yes
	Huttunen et al (2013)	Payroll tax subsidy scheme	Yes	Microeconometric – D-i-D	Yes
France	Bucher (2010)	Reduction in payroll taxes designed for long-term unemployed	Yes	Calibration with a theoretical matching model	No
	Bunel and L'Horty (2012)	Several components of labour costs (including SSC)	No	Microeconometric – matching	Yes
	Cahuc et al (2014)	Temporal SSC relief for certain workers	Yes	Microeconometric D-i-D	Yes
	Crépon and Desplatz (2002)	Payroll tax subsidy for low-wage workers	Yes	Non parametric regressions – firm level	Yes
	Kramarz and Philippon (2001)	Tax subsidies for low-wage workers (including employer payroll taxes)	Yes	Microeconometric D-i-D	Yes
	Bunel et al (2012)	Employer SSC exemptions	Yes	Simulation with macro model	No
	Cottet et al (2012)	Employers' SSC reduction devices	No	Descriptive	No
	Heyer and Plane (2012)	Employer SSC exemptions on low wages	No	Macroeconometric model	No
	Plane (2012)	Low-wage tax credit (excluding employer contributions)	Yes	Macroeconometric model	No

Country	Study (chronological order)	Evaluated policy/reform	Targeted	Type of evaluation	Meta-analysis
Germany	Bernhard et al (2008)	Wage subsidies	Yes	Microeconometric – matching	Yes
	Koch et al (2010)	Wage subsidies	Yes	Microeconometric	No
	Steinwender (2010)	Wage subsidies	No	Macroeconometric – D-i-D	Yes
	Caliendo et al (2011)	ALMP	Yes	Microeconometric – inverse probability	Yes
	Jaenichen and Stephan (2011)	Wage subsidies	Yes	Microeconometric – D-i-D	Yes
	Boockmann et al (2012)	Hiring subsidies	Yes	Microeconometric – D-i-D	Yes
	Neubäumer (2012)	Wage subsidies and vocational training	Yes	Microeconometric – matching	Yes
	Moczall (2013)	Wage subsidies	Yes	Microeconometric – matching	Yes
	Schünemann et al (2013)	Wage subsidies	Yes	Microeconometric – matching	Yes
	Büttner et al (2015)	ALMP	No	Descriptive	No
Greece	OAED (2008)	ALMP	Yes	Microeconometric – matching	Yes
	OAED (2013)	ALMP	Yes	Microeconometric – matching	Yes
Hungary	O'Leary (1998)	ALMP	Yes	Microeconometric – matching	Yes
	Frey (2008)	ALMP	Yes	Descriptive	No
	Csoba and Nagy (2012)	ALMP	Yes	Descriptive	Yes
	Cseres-Gergely et al (2015)	Wage subsidy for long term unemployed	Yes	Microeconometric – matching	Yes
Italy	Paggiaro and Trivellato (2002)	Income support + wage subsidies	Yes	Microeconometric – duration models	Yes
	Cipollone and Guelfi (2003)	Subsidies to open-end labour contracts	Yes	Microeconometric – D-i-D	Yes
	Rettore et al (2008)	Income support + wage subsidies	Yes	Microeconometric – RDD	Yes
	Costabella and Battiloro (2011)	Subsidies to open-end labour contracts	Yes	Microeconometric – matching	Yes
	Anastasia et al (2013)	Subsidies to open-end labour contracts	Yes	Microeconometric – RDD	Yes
	Mazzarella et al (2014)	Income support + wage subsidies	Yes	Microeconometric – RDD	Yes
	Ciani and De Blasio (2015)	Incentives for permanent contracts	Yes	Microeconometric – D-i-D	Yes
	Fondazione Giacomo Brodolini (2015)	Hiring incentives	Yes	Microeconometric – D-i-D + matching	Yes

Country	Study (chronological order)	Evaluated policy/reform	Targeted	Type of evaluation	Meta-analysis
Latvia	NVA (2013)	ALMP	Yes	Descriptive	No
Lithuania	Okunevičiūtė (2007)	ALMP	Yes	Descriptive	No
Macedonia	Mojsoska-Blazevski and Petreski (2015)	Employment incentives	No	Microeconometric – matching	Yes
Netherlands	Welters and Nuysken (2004)	Wage subsidies	No	Microeconometric – D-i-D	No
	Van der Geest and Heuts (2005)	Taxes and SSC exemption	Yes	Descriptive + based on previous studies	No
Norway	Stokke (2015)	Payroll tax reform	No	Microeconometric – D-i-D	Yes
Poland	Wiśniewski et al (2011)	ALMP	Yes	Microeconometric – matching	Yes
Portugal	Costa Dias and Varejão (2002)	ALMP	Yes	Microeconometric – matching	Yes
Romania	Rodríguez-Planas and Jacob (2010)	ALMP (but no wage subsidies)	No	Microeconometric – matching	No
Spain	García-Pérez and Rebollo-Sanz (2009)	Employment subsidies	Yes	Microeconometric	Yes
	Conde-Ruiz et al (2010)	Subsidies to open-end labour contracts	Yes	Descriptive	No
	Cebrián et al (2011)	Subsidies to open-end labour contracts	No	Microeconometric	Yes
	Vall Castello (2012)	Payroll tax deduction for disabled workers	Yes	Microeconometric – D-i-D	Yes
	Arranz et al (2013)	Employment subsidies	No	Macroeconometric	Yes
	Elias (2014)	Employment tax credits	Yes	Microeconometric	Yes

Country	Study (chronological order)	Evaluated policy/reform	Targeted	Type of evaluation	Meta-analysis
Sweden	Forslund et al (2004)	Employment subsidies	Yes	Microeconometric – matching	Yes
	Sianesi (2004)	ALMP	Yes	Microeconometric – matching	Yes
	Bennmarker et al (2009)	Regional payroll tax deductions	Yes	Microeconometric – D-i-D	Yes
	Pirttilä and Selin (2011)	Payroll taxes	No	Microsimulation	No
	Laun (2012)	Age-targeted tax credits (impact on retirement)	Yes	Microeconometric – D-i-D	Yes
	Egebark and Kaunitz (2014)	Payroll tax reductions for young workers	Yes	Microeconometric – D-i-D + matching	Yes
	Skedinger (2014)	Payroll tax cuts for young workers	Yes	Microeconometric – D-i-D	Yes
	Maanson and Quoreshi (2015)	Payroll tax cuts	Yes	Microeconometric – D-i-D	Yes
	Sjögren and Vikström (2015)	Wage subsidies	Yes	Microeconometric – duration models	Yes
Turkey	Betcherman et al (2010)	Employment subsidies	Yes	Microeconometric – D-i-D	Yes
	Ayhan (2013)	Reduction in the employer share of SSC for women and young men	Yes	Microeconometric – matching	Yes
	Balkan et al (2014)	Employment subsidies	Yes	Microeconometric – D-i-D	Yes
	Cilasun et al (2014)	Reduction of SSC	Yes	Microeconometric (but no control group)	No
United Kingdom	Marlow et al. (2012)	Employment subsidies	Yes	Microeconometric – matching	Yes

Country	Study (chronological order)	Evaluated policy/reform	Targeted	Type of evaluation	Meta-analysis
Argentina	Cruces et al (2010)	Changes in payroll taxes	No	Macroeconometric	No
Brazil	Scherer (2015)	Payroll tax reduction	Yes	Macroeconometric	No
Chile	Gruber (1995)	Payroll tax reduction	Yes	Microeconometric – D-i-D - firms	No
Colombia	Kugler and Kugler (2003)	Changes in payroll taxes	Yes	Microeconometric – D-i-D - firms	No
	Antón (2014)	Payroll tax reduction	Yes	Simulation with macro model	No
Jordan	Groh et al (2012)	Training and wage subsidies	Yes	Microeconometric – experimental	No
Russia	Slonimczyk (2011)	Reduction in personal income tax and in SSC	No	Microeconometric – D-i-D	No
South Africa	Levinsohn et al (2014)	Wage subsidies	Yes	Microeconometric – experimental	No
United States	Hamersma (2005)	Wage subsidies	Yes	Microeconometric – matching	No

Annex 3: Evaluation grid

Does reducing non-wage labour costs generate sustainable new employment?

This version: 6 November 2015: http://goo.gl/forms/w9uox6Y5Wr

Information about the study

* Compulsory

Authors *
(i.e. Smith, A., Keynes, J. M.)

Publication year *
(i.e. 2010)

Title *
(i.e. Empirical analysis of ...)

Source
(i.e. Journal of Economic Surveys)

Type of publication
(select only one option from the list below)

- [ ] Journal article
- [ ] Book chapter/book
- [ ] Working paper
- [ ] Report
- [ ] Mimeo
- [ ] Other

Volume & issue
(i.e. 35, 2)

Pages
(i.e. 125–198)

DOI
(i.e. 10.817/...)

Web link
(i.e. http://www...)

Language

- English
- Other (specify):

Additional comments regarding the reference

About the reform/policy change

Please fill in the questionnaire for each paper as many times as required. For instance, if more than one country or time period are considered or when adding more than one estimate.
Institutional context and macroeconomic background data for each study will be added once the dataset is completed.

Country of study
(i.e. Ireland)

Type of policy intervention
(Select only one option from the list below – following the OECD's glossary of terms (http://stats.oecd.org/glossary/) or the Eurostat labour market policy database terminology (http://ec.europa.eu/eurostat/documents/3859598/5935673/KS-GQ-13-002-EN.PDF , p. 16)

- Employer SSC
- Payroll costs
- Other employment incentives (eg. hiring or wage subsidies)
- Other non-wage labour costs (please explain below)
- Other:

Direction of the policy change
(Select only one option from the list below)

- Increase
- Reduction
- Other:

Year of the reform
(i.e. 2007 – in case it does not apply just add 'N/A')

Expected duration of the reform
(Select only one option from the list below)

- ☐ Temporary
- ☐ Permanent
- ☐ Other:

Type of reform/policy measured considered
(Select only one option from the list below)

- ☐ Single reform
- ☐ Comprehensive package
- ☐ Other

Target of the policy change/reform
(Select only one option from the list below)

- ☐ All economy
- ☐ Specific group of firms (i.e. SME or retail sector) – please specify later
- ☐ Specific group of workers (i.e. young or old or disabled) – please specify later
- ☐ Other

Additional comments regarding the policy measure

About the evaluation

Please fill in the questionnaire for each paper as many times as required. Institutional context and macroeconomic background data for each study will be added once the dataset is completed

Type of data used
(select only one option from the list below)

- ☐ Microdata – cross-section
- ☐ Microdata – longitudinal
- ☐ Cross-section
- ☐ Time series
- ☐ Panel data
- ☐ Other

Data frequency

(i.e. Annual – if it does not apply 'N/A')

Characteristics of the data source

(Select only one option from the list below)

- ☐ Administrative data
- ☐ Survey data
- ☐ Other

Data used

(Description of the data source used in the study: i.e. Muestra Continua de Vidas Laborales 1986–2006)

Type of evaluation

(select only one option from the list below)

- ☐ Macroeconomic (i.e., regional/sectoral analysis)
- ☐ Microeconomic (individuals or firms)
- ☐ Other

Econometric methodology

(Select only one option from the list below)

- ☐ Difference-in-differences
- ☐ Matching estimators (PSM and other)
- ☐ Regression discontinuity
- ☐ Experimental design
- ☐ Other

Rate the paper according to the Maryland Scientific Method Scale (SMS) by Sherman et al (1997):

(Select only one option from the list below)

- ☐ Level 1: Either (a) a cross-sectional comparison of treated groups with untreated groups, or (b) a before-and-after comparison of treated group, without an untreated comparison group. No use of control variables in statistical analysis to adjust for differences between treated and untreated groups or periods.
- ☐ Level 2: Use of adequate control variables and either (a) a cross-sectional comparison of treated groups with untreated groups, or (b) a before-and-after comparison of treated group, without an untreated comparison group. In (a), control variables or matching techniques used to account for cross-sectional differences between treated and controls groups. In (b), control variables are used to account for before-and-after changes in macro level factors.

☐ Level 3: Comparison of outcomes in treated group after an intervention, with outcomes in the treated group before the intervention, and a comparison group used to provide a counterfactual (e.g. difference in difference). Justification given to choice of comparator group that is argued to be similar to the treatment group. Evidence presented on comparability of treatment and control groups. Techniques such as regression and (propensity score) matching may be used to adjust for difference between treated and untreated groups, but there are likely to be important unobserved differences remaining.

☐ Level 4: Quasi-randomness in treatment is exploited, so that it can be credibly held that treatment and control groups differ only in their exposure to the random allocation of treatment. This often entails the use of an instrument or discontinuity in treatment, the suitability of which should be adequately demonstrated and defended.

☐ Level 5: Reserved for research designs that involve explicit randomisation into treatment and control groups, with Randomised Control Trials (RCTs) providing the definitive example. Extensive evidence provided on comparability of treatment and control groups, showing no significant differences in terms of levels or trends. Control variables may be used to adjust for treatment and control group differences, but this adjustment should not have a large impact on the main results. Attention paid to problems of selective attrition from randomly assigned groups, which is shown to be of negligible importance. There should be limited or, ideally, no occurrence of 'contamination' of the control group with the treatment.

Dependent variable

(Select only one option from the list below)

☐ Employment (only)

☐ Employment and wages

☐ Other

Exact definition of the dependent variable

(i.e. Gross/net employment creation, change in the employment rate, etc.)

Period analysed

(i.e. 1980–2007)

About the evidence

Please fill in the questionnaire for each paper as many times as required.

Targeted group

(More than one option is allowed)

- ☐ Untargeted / broad, general
- ☐ Unemployed
- ☐ Long-term unemployed
- ☐ Young
- ☐ Old
- ☐ Female
- ☐ Other: _____

Assessment of the impact (time horizon)

- ☐ Short term impacts (1 year or less)
- ☐ Medium term impacts (2–3 years)
- ☐ Long term impacts (more than 3 years)
- ☐ Other: _____

Assessment of the impact (employment)

- ☐ Intensive
- ☐ Extensive
- ☐ Other: _____

Quantitative impacts of the reform/policy change on employment

(Select only one option from the list below)

- ☐ Significantly positive
- ☐ No significant or negative effect
- ☐ Other: _____

Quantitative impacts of the reform/policy change on employment (size effect)

(Only for significantly positive studies)

- ☐ Strong
- ☐ Weak
- ☐ Not identifiable

Is this the authors' preferred estimate?

(Select only one option from the list below)

- ☐ Yes
- ☐ No
- ☐ Not identifiable

Details on the specification

(What makes each point estimate different: different controls, different samples, etc.)

Additional comments

Email address

Date

Revision date (if applicable)

Annex 4: Detailed description of the variables in the dataset for the meta-analysis

Table A4.1. Descriptive statistics of evaluations covered in the meta-analysis by country

Country	Local language	English	Article	Working Paper	Report	Other	Employment incentives	Social Security Contributions	Payroll costs	Other	Increase	Reduction	Permanent	Temporary	Comprehensive	Single	Target: All	Target: Firms	Target: Workers	Total
Continental Countries																				
Austria	2	3	2	1	2		2		2	1	2	3	5		5		1		4	**5**
Belgium	2	2		2	1	1	1	3				4		4	1	3			4	**4**
France		4	2	1		1	1	1	2		1	3	1	3		4	1		3	**4**
Germany		9	5	3		1	8			1	2	7	9		8	1	1	1	7	**9**
UK		1			1		1					1		1	1				1	**1**
Nordic countries																				
Denmark	2	3	2	1	2		3			2	1	4	3	2	1	4		1	4	**5**
Finland		5	3	2			3	1	1			5	2	3		5		2	3	**5**
Norway		1				1			1			1	1			1			1	**1**
Sweden		9	4	5			3		6			9	9		6	3		2	7	**9**
Southern countries																				
Bulgaria		1				1		1				1	1		1				1	**1**
Italy	2	6	5	2	1		6	1		1		8	2	6	3	5	2		6	**8**
Macedonia		1			1		1					1		1	1		1			**1**
Portugal	1				1		1					1	1		1				1	**1**
Romania		1	1							1		1	1			1			1	**1**
Spain	2	3	4			1	5					5	5		4	1			5	**5**
Turkey		3	2	1				3				3		3	1	2	1		2	**3**
CE countries																				
Estonia																				
Hungary		3		1	2			1		2		3	3			3			3	**3**
Poland	1				1		1					1	1		1				1	**1**
Total	**13**	**55**	**30**	**19**	**13**	**6**	**37**	**11**	**12**	**8**	**6**	**62**	**44**	**24**	**35**	**33**	**7**	**6**	**55**	**68**

Table A4.2. Descriptive statistics of evaluations covered in the meta-analysis by country (continued)

Country	Type of analysis: Macro	Type of analysis: Micro	Type of data: High frequency	Type of data: Low frequency	Undated	Type of data: Administrative	Type of data: Survey	Difference-in-Differences	Matching	Regression Ddscontinuity	Other	Maryland Scale: Level 2	Maryland Scale: Level 3	Maryland Scale: Level 4	Employment	Employment and Wages	Covered period: 1 to 5 years	Covered period: 6 to 10 years	Covered period: More than 10 years	Reference year: 2000 and before	Reference year 2001-2007	Reference year 2008 and after	Total
Continental Countries																							
Austria	1	4	3	2		5			2	1	2	3	2		4	1	4		1	2	3		**5**
Belgium		4	2	1	1	4		1			3	3	1		3	1	4			3		1	**4**
France		4			4	4		2	2				4		3	1	2	2		2	1	1	**4**
Germany	1	8	8	1		9		4	4	1			9		7	2	6	3		1	7	1	**9**
UK		1	1			1		1					1		1		1					1	**1**
Nordic Countries																							
Denmark		5	2	1	2	5		1	4				5		2	3	2	2	1	1	3	1	**5**
Finland		5		5		5		5					5			5	3	2		2	3		**5**
Norway		1		1		1		1					1			1		1		1			**1**
Sweden	1	8	4	5		8	1	7	2			2	7		4	5	4	5		2	6	1	**9**
Southern Countries																							
Bulgaria		1			1	1			1			1			1		1				1		**1**
Italy	1	7	6		2	8		3		4	1	1	6	1	7	1	6	2		3	2	3	**8**
Macedonia		1			1		1		1			1				1	1					1	**1**
Portugal		1	1			1			1				1		1			1				1	**1**
Romania		1			1		1		1				1			1	1			1			**1**
Spain	1	4	3	2		5		4			1		5		4	1	1	2	2	2	3		**5**
Turkey	1	2	2	1		1	2	3					3		3		2	1			1	2	**3**
CEE Countries																							
Estonia		1			1	1			1			1				1	1					1	**1**
Hungary		3			3	2	1			1	2	2		1	2	1	2	1		1	1	1	**3**
Poland		1		1			1		1				1		1		1					1	**1**
Total	**6**	**62**	**32**	**20**	**16**	**61**	**7**	**32**	**20**	**7**	**9**	**14**	**52**	**2**	**43**	**25**	**42**	**22**	**4**	**21**	**31**	**16**	**68**

Table A4.3. Descriptive statistics of evaluations covered in the meta-analysis by type of policy measure evaluated

	Local language	English	Article	Working Paper	Report	Other	Increase	Reduction	Permanent	Temporary	Comprehensive	Single	Target: All	Target: Firms	Target: Workers	Type of analysis: Macro	Type of analysis: Micro	Total
SSC	1	9	3	5		2		10	2	8	3	7	1	1	8	1	9	**10**
Payroll costs		12	6	4		2	2	10	9	3	6	6	1	3	8	1	11	**12**
Employment Incentives	10	28	19	8	9	2	4	34	27	11	23	15	3	2	33	3	35	**38**
Other	2	6	2	2	4			8	6	2	3	5	2		6	1	7	**8**
Total	**13**	**55**	**30**	**19**	**13**	**6**	**6**	**62**	**44**	**24**	**35**	**33**	**7**	**6**	**55**	**6**	**62**	**68**

Table A4.4. Descriptive statistics of evaluations covered in the meta-analysis by type of policy measure evaluated (continued)

	Type of data: High frequency	Type of data: Low frequency	Undated	Type of data: Administrative	Type of data: Survey	Difference-in-Differences	Matching	Regression Discontinuity	Other	Maryland Scale: Level 2	Maryland Scale: Level 3	Maryland Scale: Level 4	Employment	Employment and Wages	Covered period: 1 to 5 years	Covered period: 6 to 10 years	Covered period: More than 10 years	Reference year: 2000 and before	Reference year: 2001-2007	Reference year: 2008 and after	Total
SSC	5	3	2	8	2	6	1	2	1	3	7		7	3	8	2		4	3	3	**10**
Payroll costs	3	7	2	11	1	8	2	1	1	2	10		5	7	6	6		3	9		**12**
Employment Incentives	21	9	8	36	2	17	13	3	5	6	30	2	27	11	23	13	2	10	17	11	**38**
Other	3	1	4	6	2	1	4	3		3	5		4	4	5	1	2	4	2	2	**8**
Total	**32**	**20**	**16**	**61**	**7**	**32**	**20**	**9**	**7**	**14**	**52**	**2**	**43**	**25**	**42**	**22**	**4**	**21**	**31**	**16**	**68**

Table A4.5: Number of employment effect estimates per evaluation based on the type of policy measure evaluated

Estimates per work	Employment incentives		SSC		Payroll costs		Other		Total	
	Works	Estimates	Works	Estimates	Works	Estimates	Works	Estimates	Works	Estimates
1	17	17	2	2					19	19
2	11	22	2	4	3	6	2	4	18	36
3	5	15	3	9	4	12	2	6	14	42
4	2	8	2	8	3	12			7	28
6					2	12			2	12
7							2	14	2	14
8	1	8	1	8			1	8	3	24
9	1	9							1	9
10							1	10	1	10
13			1	13					1	13
Total	**37**	**79**	**11**	**44**	**12**	**42**	**8**	**42**	**68**	**207**

Table A4.6: Distribution of model output by characteristics of analysed/estimation study

Percentage of estimates that are:						
			Positive			
		No sign/ Negative	Weak	Strong	Observations	Association
All estimates		41%	16%	43%	207	
Design (data, method, etc.)						
Data frequency	High	28%	18%	54%	94	✓✓✓
	Low	53%	15%	32%	59	
	Undated	50%	13%	37%	54	
Data source	Administrative	36%	17%	47%	165	✓✓
	Survey	60%	12%	29%	42	
Econometric method	D-i-D	42%	19%	39%	98	✓✓
	Matching	24%	16%	60%	58	
	Other	56%	13%	31%	32	
	Regression discontinuity	58%	5%	37%	19	
Outcomes	Employment only	33%	18%	49%	127	✓✓
	Employment and wages	53%	13%	35%	80	
Number years period analysed	1 to 5	34%	17%	49%	134	✓✓✓
	6 to 10	53%	12%	35%	68	
	11 and more	40%	40%	20%	5	
Time-horizon of assessment	Long-run	38%	15%	47%	34	
	Medium-run	49%	12%	40%	86	
	Short-run	33%	21%	46%	87	
Characteristics of the study						
Group of countries	CEE	55%	14%	31%	29	
	Continental	30%	14%	56%	66	
	Nordic	39%	20%	41%	66	
	Southern	48%	15%	37%	46	
Type of publication	Article	38%	20%	42%	76	
	Other	63%	6%	31%	16	
	Report	40%	11%	49%	35	
	WP	39%	16%	45%	80	
Language	Language other than English	23%	23%	55%	22	
	English	43%	15%	42%	185	

		Percent of estimates that are:				
			Positive			
		No sign/ Negative	Weak	Strong	Observations	Association
Context (macro and labour market institutions)						
GDP growth	1st quartile	37%	15%	47%	59	✓
	2nd quartile	38%	8%	54%	50	
	3rd quartile	53%	16%	31%	51	
	4th quartile	34%	26%	40%	47	
Unemployment rate	1st quartile	31%	15%	54%	61	
	2nd quartile	47%	19%	34%	47	
	3rd quartile	46%	11%	43%	63	
	4th quartile	39%	22%	39%	36	
Degree of wage-setting coordination	Level 1		14%	86%	7	
	Level 2	51%	14%	35%	51	
	Level 2.5	50%	13%	38%	8	
	Level 3	50%	8%	42%	24	
	Level 4	33%	20%	47%	90	
	Level 5	42%	15%	42%	26	
Predominant level of wage bargaining	Level 1	49%	9%	42%	43	
	Level 2			100%	1	
	Level 3	37%	19%	45%	128	
	Level 4	45%	18%	36%	11	
	Level 5	40%	13%	47%	15	
Union density	1st quartile	39%	20%	41%	49	
	2nd quartile	34%	11%	55%	53	
	3rd quartile	42%	15%	42%	59	
	4th quartile	47%	18%	36%	45	
Adjusted bargaining (or union) coverage rate	1st quartile	46%	11%	43%	46	
	2nd quartile	43%	22%	35%	51	
	3rd quartile	41%	19%	40%	58	
	4th quartile	28%	12%	60%	43	

Note: ✓✓✓, ✓✓, ✓ *denotes that the null hypothesis of independence is rejected for the variables involved with a probability of 99, 95 and 90 percent respectively.*

Table A4.7: Test of independence between impact estimates and characteristics

	Pearson Chi2	p-value	LR Chi2	p-value	Cramér's V	gamma	ASE	Kendall's tau-b	ASE
Policy intervention									
Type of instrument	17.79	0.007	18.91	0.004	0.21	-0.25	0.087	-0.17	0.060
Direction	1.77	0.412	1.87	0.392	0.09	-0.28	0.206	-0.09	0.062
Duration	1.55	0.461	1.60	0.448	0.09	-0.02	0.125	-0.01	0.067
Scope	5.20	0.074	5.23	0.073	0.16	-0.27	0.112	-0.15	0.065
Target	16.29	0.003	19.79	0.001	0.20	0.43	0.143	0.18	0.062
Specific target group of workers									
Unemployed	1.39	0.500	1.39	0.500	0.08	0.14	0.119	0.08	0.066
Long-term unemployment	12.66	0.002	13.32	0.001	0.25	0.41	0.108	0.22	0.062
Fixed-term contract	2.92	0.232	3.53	0.171	0.12	0.59	0.365	0.09	0.062
Young	0.20	0.903	0.20	0.903	0.03	0.06	0.137	0.03	0.066
Old	5.14	0.077	4.62	0.099	0.16	0.10	0.148	0.04	0.062
Women	1.88	0.391	1.95	0.377	0.10	0.22	0.171	0.08	0.063
Disabled	2.88	0.237	2.96	0.227	0.12	0.40	0.216	0.11	0.061
Low-skilled	2.31	0.316	2.57	0.277	0.11	0.22	0.231	0.07	0.068
Design (data, method, etc.)									
Data frequency	12.47	0.014	12.72	0.013	0.17	-0.29	0.092	-0.19	0.062
Data source	7.89	0.019	7.78	0.020	0.20	-0.39	0.134	-0.18	0.065
Econometric method	15.16	0.019	15.64	0.016	0.19	-0.03	0.098	-0.02	0.064
Outcomes	7.69	0.021	7.67	0.022	0.19	-0.30	0.114	-0.17	0.066
Number years period analysed	9.00	0.061	8.58	0.073	0.15	-0.28	0.112	-0.16	0.064
Time-horizon of assessment	5.42	0.247	5.41	0.248	0.11	0.08	0.099	0.05	0.062
Characteristics of the study									
Group of countries	8.75	0.188	8.64	0.195	0.15	-0.05	0.092	-0.04	0.062
Type of publication	4.99	0.545	5.06	0.536	0.11	0.03	0.093	0.02	0.060
Language	3.34	0.188	3.54	0.170	0.13	-0.29	0.171	-0.10	0.061
Context (macro and labour market institutions)									
GDP growth	10.67	0.099	10.65	0.100	0.16	-0.08	0.085	-0.05	0.058
Unemployment rate	7.17	0.306	7.21	0.302	0.13	-0.11	0.087	-0.08	0.060
Degree of wage-setting coordination	12.09	0.279	14.38	0.156	0.17	0.05	0.092	0.04	0.061
Predominant level of wage bargaining	4.65	0.794	5.18	0.738	0.11	0.05	0.118	0.03	0.067
Union density	4.77	0.573	4.75	0.576	0.11	-0.09	0.086	-0.06	0.059
Adjusted bargaining/union coverage rate	8.43	0.208	8.44	0.207	0.15	0.16	0.092	0.11	0.063

Note: *ASE denotes asymptotic standard error.*

Annex 5: Detailed results of the meta-analysis

Table A5.1: Probit models for positive versus non-positive impact (general target)

Policy intervention						
Type of reform	Employer incentives	0.759**	0.256	0.420	1.262**	0.683*
		(0.382)	(0.347)	(0.453)	(0.497)	(0.391)
	Other	0.0987	-0.175	-0.295	0.173	-0.0766
		(0.412)	(0.371)	(0.420)	(0.367)	(0.338)
	Payroll cost	0.0733	-0.120	0.143	0.499	0.0597
		(0.376)	(0.372)	(0.399)	(0.377)	(0.299)
Direction	Increase	0.498	0.390	0.812	0.352	0.375
		(0.401)	(0.434)	(0.548)	(0.594)	(0.568)
Duration	Permanent	-0.164	0.388	0.0418	-0.833*	-0.169
		(0.314)	(0.313)	(0.371)	(0.482)	(0.314)
Scope	Single reform	-0.0375	0.367	0.557*	0.452	0.498
		(0.272)	(0.275)	(0.323)	(0.347)	(0.335)
Target	Group of firms	-1.651**	-1.830***	-2.048***	-1.735**	-1.690***
		(0.721)	(0.673)	(0.695)	(0.781)	(0.614)
	Group of workers	0.112	0.510	0.530	1.348***	1.324***
		(0.485)	(0.450)	(0.493)	(0.456)	(0.399)
Design (data, method, etc.)						
Data frequency	Low frequency		-0.293	-0.512	-1.017***	-0.791**
			(0.363)	(0.377)	(0.342)	(0.358)
	Undated		-0.648**	-1.203***	-1.139***	-0.664**
			(0.279)	(0.390)	(0.339)	(0.259)
Data source	Survey		-0.409	-0.735**	-0.853***	-0.593***
			(0.263)	(0.311)	(0.255)	(0.199)
Econometric method	Matching		0.587**	0.559	0.578	0.929***
			(0.284)	(0.413)	(0.429)	(0.353)
	Other		-0.739*	-0.888*	-1.286**	-0.729*
			(0.406)	(0.509)	(0.520)	(0.402)
	Regression discontinuity		-1.232***	-1.576***	-1.880***	-1.469***
			(0.426)	(0.440)	(0.450)	(0.406)
Outcomes	Employment and wages		-0.460**	-0.621**	-0.542**	-0.593**
			(0.228)	(0.255)	(0.238)	(0.254)
Number years analysed	Analysed		-0.0955*	-0.0946*	-0.0883	-0.0417
			(0.0508)	(0.0553)	(0.0590)	(0.0550)
Time horizon assessed	Long-run		-0.670*	-0.618*	-1.090***	-1.169***
			(0.353)	(0.364)	(0.401)	(0.395)
	Medium-run		-0.624**	-0.615**	-1.130***	-0.903***
			(0.244)	(0.283)	(0.298)	(0.301)

Characteristics of the study						
Group of countries	Continental			-1.383***	-1.264*	
				(0.527)	(0.661)	
	Nordic			-1.261**	-1.924***	
				(0.555)	(0.685)	
	Southern			-1.458***	-1.624**	
				(0.560)	(0.636)	
Type of publication	Other			-0.542	-0.747*	-0.979**
				(0.421)	(0.424)	(0.464)
	Report			-0.0325	0.391	0.346
				(0.360)	(0.357)	(0.334)
	WP			0.505	0.745**	0.545*
				(0.310)	(0.343)	(0.311)
Language	English			-0.449	0.0194	0.127
				(0.447)	(0.436)	(0.434)
Context – Macroeconomics						
Macroeconomic indicators	GDP growth				0.254***	0.233***
					(0.0545)	(0.0493)
	Unemployment rate				-0.106**	-0.0469
					(0.0421)	(0.0417)
Observations		207	207	207	207	207
χ^2		22.23	93.15	112.1	179.4	153.1
p-value		0.004	0.00	0.00	0.00	0.00
Pseudo-R^2		0.11	0.26	0.30	0.35	0.33
Log-Likelihood		-123.8	-103.3	-97.83	-90.26	-92.84

Notes: *Models are probits, fit to binary data with value 1 for significant positive estimates, and 0 for negative and non-significant estimates. *** p<0.01; ** p<0.05; * p<0.1. Standard errors clustered by study in parentheses. Omitted categories are: SSC, Decrease, Temporary, Comprehensive package, No target group, High frequency, Administrative data, D-i-D, Only employment, Short-run, CEE, Journal article, Other than English.*

Table A5.2: Probit models for positive versus non-positive impact: Detailed target

Policy intervention						
Type of reform	Employer incentives	0.519	-0.354	0.0783	0.816	-0.0852
		(0.402)	(0.416)	(0.561)	(0.684)	(0.457)
	Other	0.606	-0.0910	0.0772	0.551	-0.0203
		(0.547)	(0.472)	(0.532)	(0.512)	(0.435)
	Payroll cost	0.270	-0.260	-0.0316	0.314	-0.231
		(0.444)	(0.457)	(0.546)	(0.590)	(0.390)
Direction	Increase	0.493	0.304	0.681	0.163	0.457
		(0.566)	(0.594)	(0.772)	(0.774)	(0.699)
Duration	Permanent	-0.387	0.387	0.103	-0.464	0.200
		(0.271)	(0.338)	(0.416)	(0.528)	(0.333)
Scope	Single reform	-0.403	-0.188	0.0568	-0.211	-0.295
		(0.260)	(0.268)	(0.328)	(0.374)	(0.338)
Target	Unemployed	0.241	0.533	0.169	0.182	0.369
		(0.291)	(0.343)	(0.392)	(0.441)	(0.397)
	Long-term	0.897**	0.753*	0.411	0.623	0.821*
		(0.379)	(0.433)	(0.492)	(0.531)	(0.439)
	Fixed-term	0.922	1.447*	0.832	1.551	2.042**
		(0.841)	(0.812)	(0.969)	(1.082)	(0.924)
	Young	-0.110	0.0204	0.345	0.177	-0.0132
		(0.288)	(0.284)	(0.296)	(0.317)	(0.301)
	Old	0.234	0.677*	0.607	0.194	0.502
		(0.326)	(0.352)	(0.373)	(0.401)	(0.345)
	Women	0.225	0.169	0.480	0.888**	0.568*
		(0.335)	(0.335)	(0.357)	(0.376)	(0.303)
	Disabled	0.426	0.746	0.609	0.767	0.664
		(0.653)	(0.691)	(0.792)	(0.740)	(0.762)
	Low-skilled	0.644*	0.580	0.766	0.918*	0.827*
		(0.366)	(0.394)	(0.479)	(0.497)	(0.475)
Design (data, method, etc.)						
Data frequency	Low frequency		-0.548	-0.973***	-1.340***	-0.981***
			(0.338)	(0.357)	(0.383)	(0.343)
	Undated		-0.321	-0.997*	-1.064**	-0.476
			(0.307)	(0.536)	(0.499)	(0.332)
Data source	Survey		-0.364	-0.726**	-0.592**	-0.466**
			(0.259)	(0.311)	(0.277)	(0.201)
Econometric method	Matching		0.265	0.321	0.149	0.606*
			(0.296)	(0.381)	(0.406)	(0.348)
	Other		-1.182***	-1.162**	-1.653***	-1.216***
			(0.389)	(0.460)	(0.521)	(0.455)
	Regression discontinuity		-1.434***	-1.493***	-1.814***	-1.580***
			(0.454)	(0.421)	(0.437)	(0.432)

Outcomes	Employment and wages		-0.424	-0.581**	-0.387	-0.380
			(0.262)	(0.275)	(0.273)	(0.268)
Number years analysed			-0.105**	-0.0855*	-0.0511	-0.0899*
			(0.0414)	(0.0488)	(0.0606)	(0.0532)
Time horizon assessed	Long-run		-0.714*	-0.714*	-1.147**	-1.182***
			(0.365)	(0.393)	(0.474)	(0.459)
	Medium-run		-0.516**	-0.422	-0.778**	-0.643**
			(0.262)	(0.293)	(0.308)	(0.318)
Characteristics of the study						
Group of countries	Continental			-1.321*	-1.083	
				(0.693)	(0.791)	
	Nordic			-1.124	-1.624*	
				(0.780)	(0.866)	
	Southern			-1.525**	-1.912**	
				(0.686)	(0.780)	
Type of publication	Other			-0.411	-0.322	-0.319
				(0.474)	(0.480)	(0.489)
	Report			0.164	0.589	0.740**
				(0.387)	(0.398)	(0.355)
	WP			0.479	0.743**	0.500*
				(0.299)	(0.338)	(0.296)
Language	English			-0.311	-0.0440	0.304
				(0.439)	(0.437)	(0.409)
Context – Macroeconomics						
Macroeconomic indicators	GDP growth				0.236***	0.207***
					(0.0568)	(0.0512)
	Unemployment rate				-0.0832*	-0.0469
					(0.0502)	(0.0413)
Observations		207	207	207	207	207
χ^2		23.54	104.9	196.1	457.0	288.3
p-value		0.05	0.00	0.00	0.00	0.00
Pseudo-R^2		0.120	0.255	0.282	0.328	0.311
Log-Likelihood		-123.0	-104.1	-100.4	-93.99	-96.29

Table A5.3: Probit models for positive versus non-positive impact (including controls for labour market institutions)

		Policy intervention									
Type of reform	Employer incentives	0.765*	0.687	0.848*	0.474	0.445	-0.142	-0.173	-0.109	-0.190	-0.137
		(0.446)	(0.456)	(0.448)	(0.446)	(0.469)	(0.501)	(0.547)	(0.506)	(0.558)	(0.548)
	Other	0.00487	-0.198	0.0891	-0.355	-0.302	-0.141	-0.225	-0.112	-0.264	-0.140
		(0.400)	(0.395)	(0.409)	(0.396)	(0.438)	(0.486)	(0.485)	(0.480)	(0.534)	(0.572)
	Payroll cost	0.113	0.0710	0.231	-0.200	-0.384	-0.225	-0.188	-0.205	-0.259	-0.109
		(0.321)	(0.380)	(0.364)	(0.490)	(0.555)	(0.409)	(0.519)	(0.466)	(0.625)	(0.625)
Direction	Increase	0.408	0.443	0.247	0.453	0.353	0.529	0.671	0.525	0.693	0.605
		(0.593)	(0.586)	(0.597)	(0.599)	(0.647)	(0.709)	(0.740)	(0.720)	(0.741)	(0.766)
Duration	Permanent	-0.153	-0.209	-0.215	-0.120	-0.180	0.118	0.0875	0.111	0.0598	0.183
		(0.306)	(0.351)	(0.323)	(0.335)	(0.399)	(0.348)	(0.454)	(0.354)	(0.423)	(0.555)
Scope	Single reform	0.538	0.482	0.544	0.414	0.441	-0.368	-0.383	-0.345	-0.370	-0.367
		(0.351)	(0.333)	(0.346)	(0.324)	(0.331)	(0.382)	(0.368)	(0.364)	(0.362)	(0.366)
Target	Group of firms	-1.609***	-1.791***	-1.481**	-1.908***	-1.741**					
		(0.606)	(0.655)	(0.656)	(0.680)	(0.716)					
	Group of workers	1.373***	1.215***	1.460***	1.115***	1.285***					
		(0.427)	(0.417)	(0.458)	(0.407)	(0.429)					
	Unemployed						0.263	0.203	0.275	0.233	0.196
							(0.390)	(0.406)	(0.392)	(0.413)	(0.433)
	Long-term						0.919*	0.950*	0.950*	0.951*	1.019*
							(0.488)	(0.504)	(0.513)	(0.505)	(0.528)
	Fixed-term						2.114**	2.060**	2.055**	1.999**	2.073*
							(0.964)	(1.017)	(0.924)	(0.973)	(1.064)
	Young						-0.0321	-0.0640	-0.0546	-0.0715	-0.0984
							(0.306)	(0.314)	(0.319)	(0.312)	(0.305)

Target	Old							0.527	0.508	0.535	0.504	0.509
								(0.342)	(0.339)	(0.344)	(0.346)	(0.384)
	Women							0.535*	0.656**	0.484*	0.613*	0.620**
								(0.293)	(0.312)	(0.290)	(0.317)	(0.314)
	Disabled							0.751	0.557	0.760	0.542	0.573
								(0.789)	(0.816)	(0.785)	(0.818)	(0.843)
	Low-skilled							0.729	0.714	0.722	0.700	0.668
								(0.491)	(0.479)	(0.489)	(0.498)	(0.459)
Design (data, method, etc.)												
Data frequency	Low frequency		-0.791**	-0.802**	-0.878**	-0.701*	-0.657*	-1.047***	-1.021***	-1.017***	-0.974**	-0.984***
			(0.368)	(0.374)	(0.353)	(0.385)	(0.376)	(0.327)	(0.357)	(0.357)	(0.401)	(0.381)
	Undated		-0.808**	-0.721**	-0.763***	-0.704***	-0.907***	-0.394	-0.482	-0.458	-0.527	-0.554
			(0.319)	(0.290)	(0.273)	(0.266)	(0.313)	(0.409)	(0.384)	(0.369)	(0.360)	(0.423)
Data source	Survey		-0.673***	-0.695**	-0.635***	-0.526*	-0.587**	-0.367*	-0.493*	-0.379*	-0.500*	-0.420
			(0.218)	(0.277)	(0.218)	(0.272)	(0.271)	(0.211)	(0.283)	(0.216)	(0.282)	(0.306)
Econometric method	Matching		0.891**	0.932**	0.805**	0.985**	0.812*	0.795**	0.733*	0.772**	0.725*	0.685*
			(0.370)	(0.383)	(0.400)	(0.396)	(0.429)	(0.379)	(0.381)	(0.371)	(0.381)	(0.367)
	Other		-0.695*	-0.634	-0.795**	-0.701	-0.789	-1.153**	-1.107**	-1.145***	-1.082**	-1.222**
			(0.418)	(0.451)	(0.402)	(0.430)	(0.480)	(0.459)	(0.511)	(0.441)	(0.488)	(0.559)
	Regression discontinuity		-1.535***	-1.421***	-1.577***	-1.382***	-1.582***	-1.514***	-1.437***	-1.528***	-1.448***	-1.472***
			(0.406)	(0.410)	(0.455)	(0.416)	(0.436)	(0.420)	(0.427)	(0.439)	(0.426)	(0.439)

Outcomes	Employment and wages		-0.569**	-0.590**	-0.521*	-0.669**	-0.727**	-0.223	-0.290	-0.205	-0.322	-0.226
			(0.275)	(0.276)	(0.270)	(0.306)	(0.317)	(0.300)	(0.305)	(0.325)	(0.344)	(0.365)
Number years analysed			-0.0921*	-0.0843	-0.0756	-0.0728	-0.0825	-0.0905*	-0.0936*	-0.0950*	-0.0958*	-0.0976*
			(0.0544)	(0.0548)	(0.0553)	(0.0530)	(0.0508)	(0.0521)	(0.0538)	(0.0540)	(0.0542)	(0.0529)
Time horizon assessed	Long-run		-1.103***	-1.117***	-1.198***	-1.160***	-1.109**	-1.207**	-1.113**	-1.170**	-1.078**	-1.111**
			(0.402)	(0.425)	(0.394)	(0.437)	(0.458)	(0.474)	(0.509)	(0.459)	(0.493)	(0.518)
	Medium-run		-0.872***	-0.957***	-0.891***	-0.974***	-0.870***	-0.755**	-0.811**	-0.765**	-0.804**	-0.858***
			(0.304)	(0.308)	(0.309)	(0.308)	(0.290)	(0.340)	(0.336)	(0.341)	(0.337)	(0.298)
Characteristics of the study												
Type of publication	Other		-0.891*	-0.953*	-0.942**	-1.038**	-0.925*	-0.472	-0.568	-0.416	-0.523	-0.547
			(0.460)	(0.501)	(0.416)	(0.523)	(0.487)	(0.516)	(0.555)	(0.476)	(0.536)	(0.545)
	Report		0.246	0.540	0.332	0.696	0.645	0.859**	1.225**	0.819**	1.194**	1.281**
			(0.388)	(0.451)	(0.355)	(0.438)	(0.453)	(0.413)	(0.520)	(0.368)	(0.503)	(0.519)
	WP		0.591*	0.618*	0.600*	0.546	0.589*	0.442	0.494	0.454	0.504	0.486
			(0.335)	(0.347)	(0.327)	(0.339)	(0.334)	(0.303)	(0.313)	(0.299)	(0.312)	(0.309)
Language	English		0.0704	0.211	0.0846	0.249	0.115	0.367	0.504	0.335	0.486	0.481
			(0.456)	(0.458)	(0.457)	(0.461)	(0.492)	(0.436)	(0.452)	(0.414)	(0.441)	(0.454)
Context – Macroeconomic and labour market institutions												
Macroeconomic indicators	GDP growth		0.236***	0.233***	0.254***	0.235***	0.260***	0.217***	0.220***	0.217***	0.218***	0.229***
			(0.0486)	(0.0485)	(0.0560)	(0.0532)	(0.0612)	(0.0549)	(0.0549)	(0.0571)	(0.0543)	(0.0625)
	Unemployment rate		-0.0579	-0.0342	-0.0777	-0.0162	-0.0329	0.00781	0.0182	1.54e-08	0.0209	-0.0104
			(0.0525)	(0.0513)	(0.0552)	(0.0551)	(0.0621)	(0.0607)	(0.0580)	(0.0566)	(0.0592)	(0.0710)

Macroeconomic indicators	Wage-setting coordination	0.0901	-0.125				0.0434	0.0477				-0.138
		(0.235)	(0.158)				(0.357)	(0.174)				(0.425)
	Level wage bargaining	-0.0868		-0.00983			-0.330		0.0947			0.317
		(0.352)		(0.168)			(0.549)		(0.189)			(0.694)
	Union density	-0.00657			-0.00695		-0.00735			-0.000506		-0.00311
		(0.00740)			(0.00729)		(0.00938)			(0.00726)		(0.00898)
	Adjusted bargaining coverage	0.00704				0.00519	0.0181				0.00330	-0.00379
		(0.00936)				(0.00680)	(0.0148)				(0.00742)	(0.0192)
Observations		198	206	198	206	198	198	206	198	206	198	198
χ^2		1.482	159.6	140.0	162.5	134.2	176.0	380.1	510.2	420.8	407.8	649.5
p-value		0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pseudo-R^2		0.01	0.33	0.35	0.33	0.35	0.35	0.31	0.33	0.31	0.33	0.33
Log-Likelihood		-131.8	-92.58	-87.03	-92.45	-86.83	-86.05	-95.52	-89.43	-95.55	-89.45	-89.32

Table A5.4: Ordered probit models for degree of the impact (general target)

Policy intervention						
Type of reform	Employer incentives	0.555	-0.0739	-0.123	0.461	0.0250
		(0.381)	(0.358)	(0.442)	(0.450)	(0.419)
	Other	0.0863	-0.286	-0.475	-0.0391	-0.286
		(0.418)	(0.386)	(0.432)	(0.355)	(0.344)
	Payroll cost	-0.0242	-0.293	-0.193	0.0738	-0.314
		(0.408)	(0.416)	(0.405)	(0.377)	(0.369)
Direction	Increase	0.478	0.552	0.699	0.166	0.443
		(0.370)	(0.367)	(0.447)	(0.495)	(0.391)
Duration	Permanent	-0.276	0.0390	-0.183	-0.862**	-0.473
		(0.309)	(0.297)	(0.341)	(0.385)	(0.324)
Scope	Single reform	-0.157	0.0475	0.127	-0.0473	-0.121
		(0.261)	(0.268)	(0.273)	(0.308)	(0.331)
Target	Group of firms	-1.642**	-1.799***	-1.901***	-1.556**	-1.752***
		(0.664)	(0.651)	(0.678)	(0.772)	(0.679)
	Group of workers	0.143	0.493	0.530	1.277***	1.078***
		(0.506)	(0.513)	(0.496)	(0.438)	(0.398)
Design (data, method, etc.)						
Data frequency	Low frequency		-0.189	-0.343	-0.792**	-0.546
			(0.340)	(0.370)	(0.340)	(0.378)
	Undated		-0.367	-0.636**	-0.512	-0.219
			(0.278)	(0.322)	(0.314)	(0.299)
Data source	Survey		-0.479*	-0.775**	-0.912***	-0.730***
			(0.264)	(0.337)	(0.271)	(0.237)
Econometric method	Matching		0.584**	0.560	0.416	0.706**
			(0.283)	(0.392)	(0.441)	(0.355)
	Other		-0.611*	-0.677	-1.092**	-0.675*
			(0.361)	(0.462)	(0.489)	(0.405)
	Regression discontinuity		-0.933**	-1.105***	-1.445***	-1.149***
			(0.391)	(0.420)	(0.482)	(0.403)
Outcomes	Employment and wages		-0.268	-0.316	-0.244	-0.324
			(0.195)	(0.228)	(0.191)	(0.202)
Number years analysed			-0.0935**	-0.0948**	-0.0798*	-0.0375
			(0.0418)	(0.0466)	(0.0458)	(0.0473)
Time horizon assessed	Long-run		-0.289	-0.249	-0.618**	-0.575**
			(0.296)	(0.292)	(0.263)	(0.277)
	Medium-run		-0.440*	-0.449*	-0.777***	-0.605**
			(0.227)	(0.234)	(0.243)	(0.245)

Characteristics of the study						
Group of countries	Continental			-0.725	-0.499	
				(0.527)	(0.531)	
	Nordic			-0.693	-1.215**	
				(0.467)	(0.519)	
	Southern			-0.775	-0.780	
				(0.516)	(0.492)	
Type of publication	Other			-0.641*	-0.896**	-0.867**
				(0.382)	(0.372)	(0.380)
	Report			0.143	0.439	0.372
				(0.288)	(0.291)	(0.317)
	WP			0.193	0.288	0.168
				(0.276)	(0.321)	(0.307)
Language	English			-0.0948	0.239	0.202
				(0.375)	(0.413)	(0.436)
Context – Macroeconomic						
Macroeconomic indicators	GDP growth				0.200***	0.167***
					(0.0494)	(0.0480)
	Unemployment rate				-0.109**	-0.0576*
					(0.0432)	(0.0347)
Observations		207	207	207	207	207
χ^2		24.39	121.7	125.7	160.7	134.6
p-value		0.00	0.00	0.00	0.00	0.00
Pseudo-R^2		0.07	0.16	0.18	0.22	0.21
Log-Likelihood		-195.8	-177.0	-173.6	-165.5	-167.9

Notes: *Models are ordered probits, fit to ordinal data with value 1 for negative and non-significant estimates, 2 for significant weak positive estimates, and 3 for significant strong estimates. *** p<0.01; ** p<0.05; * p<0.1. Standard errors clustered by study in parentheses. Omitted categories are: SSC, Decrease, Temporary, Comprehensive package, No target group, High frequency, Administrative data, D-i-D, Only employment, Short-run, CEE, Journal article, Other than English.*

Table A5.5: Ordered probit models for degree of the impact (detailed target)

Policy intervention						
Type of reform	Employer incentives	0.237	-0.771*	-0.792	-0.391	-0.728*
		(0.357)	(0.402)	(0.517)	(0.478)	(0.396)
	Other	0.458	-0.375	-0.423	-0.0642	-0.376
		(0.524)	(0.474)	(0.531)	(0.389)	(0.368)
	Payroll cost	0.131	-0.490	-0.614	-0.556	-0.594
		(0.449)	(0.465)	(0.503)	(0.495)	(0.369)
Direction	Increase	0.266	0.163	0.409	-0.254	0.182
		(0.425)	(0.415)	(0.580)	(0.587)	(0.508)
Duration	Permanent	-0.443*	0.249	0.117	-0.264	-0.0700
		(0.254)	(0.308)	(0.358)	(0.375)	(0.325)
Scope	Single reform	-0.576**	-0.493**	-0.424	-0.837***	-0.859***
		(0.245)	(0.227)	(0.266)	(0.280)	(0.279)
Target	Unemployed	0.372	0.656**	0.518	0.520	0.695**
		(0.227)	(0.261)	(0.323)	(0.369)	(0.339)
	Long-term	0.844***	0.667*	0.508	0.616	0.789**
		(0.319)	(0.353)	(0.411)	(0.413)	(0.343)
	Fixed-term	1.431*	2.257***	2.362***	3.282***	3.190***
		(0.865)	(0.782)	(0.889)	(0.980)	(0.958)
	Young	-0.0903	0.114	0.286	0.120	-0.0148
		(0.261)	(0.252)	(0.286)	(0.277)	(0.255)
	Old	0.0277	0.443	0.529	0.144	0.302
		(0.274)	(0.301)	(0.338)	(0.322)	(0.289)
	Women	0.0271	-0.00936	0.211	0.487	0.249
		(0.281)	(0.320)	(0.374)	(0.366)	(0.318)
	Disabled	0.738	1.192**	1.184*	1.483**	1.208**
		(0.505)	(0.552)	(0.645)	(0.584)	(0.601)
	Low-skilled	0.857**	0.726*	0.795*	0.937**	1.021**
		(0.391)	(0.392)	(0.462)	(0.471)	(0.463)
Design (data, method, etc.)						
Data frequency	Low frequency		-0.423	-0.632*	-0.987***	-0.817***
			(0.275)	(0.336)	(0.325)	(0.308)
	Undated		-0.0429	-0.225	-0.0873	-0.00501
			(0.277)	(0.503)	(0.404)	(0.283)
Data source	Survey		-0.436	-0.654*	-0.507*	-0.609**
			(0.291)	(0.362)	(0.301)	(0.244)
Econometric method	Matching		0.244	0.321	0.0694	0.359
			(0.255)	(0.328)	(0.332)	(0.256)
	Other		-1.182***	-1.159***	-1.536***	-1.281***
			(0.369)	(0.431)	(0.467)	(0.407)
	Regression discontinuity		-1.362***	-1.303***	-1.576***	-1.587***
			(0.446)	(0.477)	(0.506)	(0.479)

Outcomes	Employment and wages		-0.319	-0.421	-0.220	-0.241
			(0.236)	(0.258)	(0.254)	(0.234)
Number years analysed			-0.105***	-0.111***	-0.0929**	-0.0610
			(0.0342)	(0.0417)	(0.0467)	(0.0455)
Time horizon assessed	Long-run		-0.360	-0.403	-0.792***	-0.751***
			(0.281)	(0.291)	(0.282)	(0.280)
	Medium-run		-0.292	-0.237	-0.428	-0.404
			(0.250)	(0.285)	(0.279)	(0.271)
Characteristics of the study						
Group of countries	Continental			-0.482	0.0800	
				(0.666)	(0.623)	
	Nordic			-0.220	-0.287	
				(0.720)	(0.689)	
	Southern			-0.676	-0.738	
				(0.659)	(0.624)	
Type of publication	Other			-0.266	-0.283	-0.187
				(0.471)	(0.467)	(0.445)
	Report			0.325	0.574*	0.649**
				(0.337)	(0.328)	(0.321)
	WP			0.253	0.373	0.301
				(0.272)	(0.276)	(0.251)
Language	English			0.121	0.302	0.521
				(0.416)	(0.429)	(0.388)
Context – Macroeconomic						
Macroeconomic indicators	GDP growth				0.218***	0.186***
					(0.0538)	(0.0490)
	Unemployment rate				-0.0601	-0.0644*
					(0.0445)	(0.0367)
Observations		207	207	207	207	207
χ^2		33.08	150.0	212.8	382.2	324.6
p-value		0.00	0.00	0.00	0.00	0.00
Pseudo-R^2		0.09	0.17	0.19	0.22	0.22
Log-Likelihood		-192.7	-174.5	-172.1	-164.0	-165.4

Table A5.6: Ordered probit models for degree of the impact (including controls for labour market institutions)

			Policy intervention									
Type of reform	Employer incentives		0.0357	0.000971	0.173	-0.130	-0.158	-0.844*	-0.789*	-0.789*	-0.736	-0.766
			(0.455)	(0.478)	(0.451)	(0.468)	(0.460)	(0.435)	(0.472)	(0.453)	(0.493)	(0.507)
	Other		-0.316	-0.515	-0.170	-0.609	-0.646	-0.553	-0.558	-0.500	-0.520	-0.572
			(0.386)	(0.395)	(0.378)	(0.403)	(0.443)	(0.423)	(0.423)	(0.424)	(0.473)	(0.543)
	Payroll cost		-0.303	-0.335	-0.159	-0.504	-0.598	-0.629	-0.583	-0.648	-0.542	-0.460
			(0.383)	(0.439)	(0.385)	(0.511)	(0.541)	(0.395)	(0.462)	(0.443)	(0.536)	(0.575)
Direction	Increase		0.467	0.528	0.324	0.542	0.389	0.221	0.321	0.247	0.331	0.332
			(0.399)	(0.397)	(0.414)	(0.410)	(0.467)	(0.511)	(0.510)	(0.532)	(0.501)	(0.505)
Duration	Permanent		-0.470	-0.518	-0.508	-0.483	-0.593*	-0.142	-0.146	-0.107	-0.201	-0.350
			(0.320)	(0.330)	(0.321)	(0.319)	(0.360)	(0.333)	(0.388)	(0.343)	(0.367)	(0.467)
Scope	Single reform		-0.117	-0.166	-0.0632	-0.194	-0.159	-0.973***	-0.911***	-0.909***	-0.883***	-0.960***
			(0.344)	(0.345)	(0.320)	(0.334)	(0.330)	(0.287)	(0.279)	(0.287)	(0.279)	(0.292)
Target	Group of firms		-1.780***	-1.948***	-1.617**	-1.997***	-1.913**					
			(0.650)	(0.683)	(0.676)	(0.707)	(0.758)					
	Group of workers		1.018**	0.884**	1.185***	0.835*	0.971**					
			(0.432)	(0.442)	(0.445)	(0.440)	(0.438)					
	Unemployed							0.590*	0.569*	0.631*	0.592*	0.549
								(0.341)	(0.344)	(0.336)	(0.347)	(0.369)
	Long-term							0.802**	0.829**	0.785**	0.862**	0.939**
								(0.357)	(0.379)	(0.380)	(0.379)	(0.407)
	Fixed-term							3.437***	3.189***	3.202***	3.086***	3.354***
								(1.014)	(1.040)	(0.949)	(0.999)	(1.077)
	Young							0.0158	-0.0544	-0.0224	-0.0689	-0.0262
								(0.264)	(0.264)	(0.267)	(0.260)	(0.260)

Target	Old							0.303	0.303	0.346	0.312	0.274
								(0.288)	(0.291)	(0.300)	(0.293)	(0.308)
	Women							0.353	0.346	0.262	0.285	0.359
								(0.310)	(0.346)	(0.324)	(0.334)	(0.335)
	Disabled							1.231**	1.108*	1.298**	1.116*	1.033*
								(0.611)	(0.621)	(0.618)	(0.618)	(0.592)
	Low-skilled							0.969**	0.933**	0.948**	0.957*	1.038**
								(0.466)	(0.468)	(0.466)	(0.498)	(0.523)
Design (data, method, etc.)												
Data frequency	Low frequency		-0.568	-0.558	-0.639*	-0.502	-0.530	-0.938***	-0.867***	-0.856***	-0.851**	-0.959***
			(0.382)	(0.386)	(0.360)	(0.401)	(0.349)	(0.294)	(0.314)	(0.322)	(0.345)	(0.314)
	Undated		-0.248	-0.303	-0.311	-0.315	-0.356	0.222	-0.0332	0.0554	-0.0950	0.114
			(0.360)	(0.320)	(0.282)	(0.292)	(0.336)	(0.361)	(0.339)	(0.343)	(0.312)	(0.374)
Data source	Survey		-0.713***	-0.860**	-0.757***	-0.775**	-0.768**	-0.475*	-0.637**	-0.573**	-0.693**	-0.644**
			(0.266)	(0.337)	(0.255)	(0.319)	(0.312)	(0.244)	(0.302)	(0.252)	(0.295)	(0.290)
Econometric method	Matching		0.742**	0.725**	0.634*	0.744**	0.639*	0.579**	0.464*	0.519*	0.425	0.486
			(0.340)	(0.344)	(0.383)	(0.362)	(0.381)	(0.287)	(0.270)	(0.287)	(0.263)	(0.307)
	Other		-0.632	-0.551	-0.698*	-0.581	-0.671	-1.278***	-1.191***	-1.192***	-1.141***	-1.188***
			(0.416)	(0.431)	(0.400)	(0.415)	(0.461)	(0.414)	(0.438)	(0.400)	(0.419)	(0.446)
	Regression discontinuity		-1.124***	-1.064***	-1.218***	-1.052**	-1.176***	-1.507***	-1.475***	-1.530***	-1.482***	-1.447***
			(0.407)	(0.408)	(0.450)	(0.413)	(0.445)	(0.470)	(0.468)	(0.474)	(0.463)	(0.453)
Outcomes	Employment and wages		-0.285	-0.348*	-0.251	-0.390*	-0.431**	-0.190	-0.208	-0.173	-0.194	-0.212
			(0.211)	(0.210)	(0.206)	(0.216)	(0.215)	(0.249)	(0.237)	(0.261)	(0.251)	(0.268)
Number years analysed			-0.0714	-0.0689	-0.0685	-0.0735	-0.0746*	-0.0760*	-0.0797*	-0.0829*	-0.0800*	-0.0705
			(0.0476)	(0.0465)	(0.0462)	(0.0455)	(0.0435)	(0.0449)	(0.0452)	(0.0459)	(0.0454)	(0.0457)

Time horizon assessed	Long-run		-0.579**	-0.536*	-0.614**	-0.539*	-0.581**	-0.875***	-0.745**	-0.769***	-0.695**	-0.785**
			(0.281)	(0.284)	(0.270)	(0.277)	(0.288)	(0.294)	(0.295)	(0.279)	(0.286)	(0.315)
	Medium-run		-0.624***	-0.709***	-0.622**	-0.710***	-0.693***	-0.484*	-0.530*	-0.462	-0.524*	-0.547**
			(0.240)	(0.236)	(0.247)	(0.240)	(0.236)	(0.285)	(0.280)	(0.289)	(0.281)	(0.276)
Characteristics of the study												
Type of publication	Other		-0.859**	-0.858**	-0.876**	-0.894**	-0.890**	-0.461	-0.380	-0.269	-0.301	-0.493
			(0.395)	(0.418)	(0.349)	(0.409)	(0.426)	(0.504)	(0.493)	(0.451)	(0.455)	(0.523)
	Report		0.385	0.747*	0.349	0.827**	0.873**	0.913**	1.082**	0.707**	0.991**	1.196**
			(0.355)	(0.401)	(0.333)	(0.374)	(0.401)	(0.384)	(0.518)	(0.333)	(0.485)	(0.537)
	WP		0.177	0.279	0.216	0.246	0.263	0.237	0.333	0.276	0.353	0.318
			(0.327)	(0.335)	(0.311)	(0.314)	(0.324)	(0.253)	(0.268)	(0.253)	(0.264)	(0.262)
Language	English		0.219	0.361	0.186	0.391	0.322	0.685	0.724*	0.576	0.671	0.766*
			(0.444)	(0.449)	(0.435)	(0.445)	(0.464)	(0.417)	(0.437)	(0.390)	(0.420)	(0.453)

Context – Macroeconomic and labour market institutions												
Macroeconomic indicators	GDP growth		0.165***	0.165***	0.185***	0.165***	0.192***	0.200***	0.192***	0.182***	0.187***	0.206***
			(0.0481)	(0.0470)	(0.0527)	(0.0481)	(0.0531)	(0.0510)	(0.0505)	(0.0529)	(0.0493)	(0.0552)
	Unemployment rate		-0.0503	-0.0390	-0.0769	-0.0273	-0.0223	-0.0124	-0.0231	-0.0240	-0.0240	0.00284
			(0.0449)	(0.0409)	(0.0518)	(0.0422)	(0.0563)	(0.0498)	(0.0448)	(0.0520)	(0.0472)	(0.0667)
	Wage-setting coordination	0.0821	-0.0117				0.233	0.183				0.321
		(0.247)	(0.161)				(0.262)	(0.165)				(0.324)
	Level wage bargaining	-0.0823		0.0265			-0.354		0.0942			-0.172
		(0.323)		(0.181)			(0.509)		(0.184)			(0.528)
	Union density	-0.00609			-0.00564		-0.00841			0.00258		-0.00302
		(0.00764)			(0.00658)		(0.00821)			(0.00632)		(0.00791)
	Adjusted bargaining coverage	0.00560				0.00403	0.0149				0.00108	0.00266
		(0.00911)				(0.00597)	(0.0137)				(0.00660)	(0.0145)
Observations		198	206	198	206	198	198	206	198	206	198	198
χ^2		0.932	147.8	138.9	136.2	125.6	163.4	309.9	411.7	334.7	401.4	459.5
p-value		0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pseudo-R^2		0.01	0.20	0.22	0.20	0.22	0.22	0.22	0.23	0.22	0.23	0.23
Log-Likelihood		-201.4	-167.7	-159.0	-167.4	-158.8	-158.0	-164.3	-156.2	-164.8	-156.3	-155.7

Table A5.7: Probit models for strong versus weak positive impact (detailed target)

Policy intervention					
Type of reform	Employer incentives	-1.346***	-2.120***	-15.72***	-5.069***
		(0.472)	(0.663)	(3.558)	(1.381)
	Other	-0.369	-1.647**	-14.22***	-3.774***
		(0.613)	(0.796)	(3.809)	(1.419)
	Payroll cost	-1.212*	-1.946**	-18.17***	-5.438***
		(0.669)	(0.801)	(4.479)	(1.560)
Direction	Increase	-0.822	-1.151**	0.763	-1.163
		(0.528)	(0.517)	(1.464)	(1.032)
Duration	Permanent	-0.304	-0.200	3.724**	-6.603***
		(0.289)	(0.476)	(1.714)	(1.981)
Scope	Single reform	-1.369***	-1.632***	-7.908***	-6.808***
		(0.285)	(0.320)	(2.106)	(1.739)
Target	Unemployed	0.621*	0.614*	6.078***	6.434***
		(0.332)	(0.366)	(1.831)	(1.633)
	Long-term	0.540	0.621	0.985	3.717***
		(0.424)	(0.394)	(0.929)	(1.000)
	Fixed-term	-	-	-	-
	Young	0.312	0.553	-1.335	-1.083*
		(0.365)	(0.481)	(0.901)	(0.602)
	Old	-0.623	-0.560	0.0383	-3.115***
		(0.474)	(0.448)	(0.814)	(0.699)
	Women	-0.546	-0.851*	-5.824***	-3.887**
		(0.502)	(0.468)	(1.702)	(1.812)
	Disabled	1.677***	2.460***	10.01***	4.853***
		(0.630)	(0.656)	(2.369)	(1.489)
	Low-skilled	2.040***	1.634***	0.287	5.712***
		(0.549)	(0.502)	(0.817)	(1.563)
Design (data, method, etc.)					
Data frequency	Low frequency		-0.261	3.706**	-2.791***
			(0.569)	(1.620)	(1.055)
	Undated		0.906**	13.14***	2.323**
			(0.410)	(3.792)	(0.976)
Data source	Survey		-0.134	1.055**	-1.581***
			(0.505)	(0.472)	(0.500)
Econometric method	Matching		0.212	5.186***	0.695
			(0.355)	(1.596)	(0.657)
	Other		-0.681	-0.0690	-2.139*
			(0.447)	(1.237)	(1.127)
	Regression discontinuity		-0.302	-0.406	-1.845
			(0.694)	(1.141)	(1.478)
Outcomes	Employment and wages		0.424	-1.208	1.003
			(0.487)	(0.860)	(0.812)

Number years analysed			-0.0842	0.0276	0.762***
			(0.0680)	(0.145)	(0.196)
Time horizon assessed	Long-run		0.751	0.802	-1.326
			(0.527)	(1.185)	(0.910)
	Medium-run		0.0929	0.772	-1.309*
			(0.393)	(0.974)	(0.697)
Characteristics of the study					
Group of countries	Continental			11.34***	
				(3.107)	
	Nordic			18.18***	
				(5.067)	
	Southern			14.78***	
				(4.670)	
Type of publication	Other			4.326***	1.891**
				(1.651)	(0.899)
	Report			5.363***	5.952***
				(1.068)	(1.669)
	WP			0.600	3.139***
				(0.479)	(0.771)
Language	English			5.552***	8.681***
				(1.141)	(2.412)
Context – Macroeconomic					
Macroeconomic indicators	GDP growth				0.470***
					(0.0952)
	Unemployment rate				-0.677***
					(0.164)
Observations		119	119	119	119
χ^2		54.66	106.9	1066	471.6
p-value		0.00	0.00	0.00	0.00
Pseudo-R^2		0.18	0.24	0.44	0.44
Log-Likelihood		-57.35	-53.59	-39.18	-39.34

Table A5.8: Probit models for strong versus weak positive impact (including controls for labour market institutions)

Policy intervention							
Type of reform	Employer incentives		-6.652***	-11.36***	-5.860***	-9.682***	-13.29***
			(1.540)	(3.054)	(2.000)	(3.440)	(3.424)
	Other		-5.593***	-7.689***	-5.057**	-7.475**	-15.42***
			(1.603)	(2.067)	(2.544)	(3.396)	(4.208)
	Payroll cost		-7.659***	-12.10***	-6.652***	-10.60***	-16.78***
			(1.632)	(3.148)	(2.485)	(3.966)	(4.042)
Direction	Increase		-1.818	3.354*	-0.625	1.692	5.705**
			(1.507)	(1.896)	(1.674)	(1.997)	(2.318)
Duration	Permanent		-7.337***	-11.25***	-6.364***	-8.703**	-21.41***
			(1.439)	(2.992)	(1.848)	(4.227)	(5.923)
Scope	Single reform		-8.756***	-10.54***	-6.949***	-7.858***	-16.03***
			(1.693)	(2.131)	(1.749)	(2.640)	(4.377)
Target	Group of firms						
	Group of workers						
	Unemployed		6.726***	6.919***	6.431***	6.864***	8.646***
			(1.238)	(1.113)	(1.604)	(2.115)	(1.981)
	Long-term		3.080***	6.227***	3.396***	5.000**	8.641***
			(1.060)	(1.439)	(1.158)	(2.168)	(1.814)
	Fixed-term		-	-	-	-	-
	Young		-1.561***	-1.999***	-1.048*	-1.553***	-1.548***
			(0.371)	(0.347)	(0.566)	(0.374)	(0.483)
	Old		-4.114***	-5.342***	-2.966***	-3.826***	-6.470***
			(0.652)	(0.874)	(0.742)	(0.750)	(1.109)
	Women		-2.707***	-3.040***	-3.542**	-4.603*	-2.393***
			(0.692)	(0.697)	(1.595)	(2.570)	(0.158)
	Disabled		5.554***	3.514**	5.688**	4.888***	9.633**
			(1.377)	(1.372)	(2.295)	(1.740)	(4.424)
	Low-skilled		6.811***	5.723***	4.930***	4.230***	7.235***
			(1.228)	(1.625)	(1.696)	(1.474)	(2.734)
Design (data, method, etc.)							
Data frequency	Low frequency		-2.982**	-2.056*	-2.323*	-1.032	-5.686*
			(1.168)	(1.188)	(1.224)	(1.306)	(3.429)
	Undated		4.525***	2.258**	3.465*	1.897	10.49*
			(1.432)	(0.900)	(1.978)	(1.198)	(5.365)
Data source	Survey		-1.200**	-1.035**	-1.652***	-0.985*	-3.652**
			(0.564)	(0.493)	(0.563)	(0.519)	(1.848)
Econometric method	Matching		1.880	1.540	0.716	0.631	2.402*
			(1.188)	(0.968)	(0.634)	(0.804)	(1.288)
	Other		-2.064**	-2.920**	-2.606	-3.216*	-3.380**
			(1.038)	(1.346)	(1.639)	(1.840)	(1.636)
	Regression discontinuity		-1.870	-2.165	-2.014	-2.239	-1.992
			(1.466)	(1.724)	(1.763)	(1.900)	(1.748)
Outcomes	Employment and wages		0.662	0.128	0.595	-0.236	1.391
			(0.812)	(0.986)	(1.076)	(0.932)	(1.977)

Number years analysed			0.880***	1.363***	0.761***	0.999**	2.394***
			(0.149)	(0.279)	(0.192)	(0.396)	(0.628)
Time horizon assessed	Long-run		-1.836*	-2.361**	-1.104	-1.305	-2.646*
			(1.026)	(1.121)	(0.966)	(1.231)	(1.464)
	Medium-run		-1.862**	-2.265**	-0.965	-1.223	-2.577*
			(0.730)	(0.887)	(0.820)	(1.017)	(1.402)
Characteristics of the study							
Type of publication	Other		1.236	5.364***	2.583*	4.102***	5.268**
			(1.178)	(1.749)	(1.466)	(1.565)	(2.091)
	Report		7.627***	17.67***	6.541***	12.26**	30.16***
			(1.591)	(4.741)	(2.134)	(6.009)	(7.722)
	WP		3.063***	4.966***	3.187***	4.064**	8.375***
			(0.758)	(1.250)	(0.788)	(1.644)	(2.446)
Language	English		9.860***	18.90***	8.699***	14.07***	28.16***
			(1.850)	(4.115)	(2.334)	(5.366)	(6.711)
Context – Macroeconomic and labour market institutions							
Macroeconomic indicators	GDP growth		0.634***	0.675***	0.393***	0.377***	0.810***
			(0.130)	(0.131)	(0.109)	(0.119)	(0.257)
	Unemployment rate		-0.576***	-0.865***	-0.624***	-0.565***	-1.020*
			(0.148)	(0.163)	(0.162)	(0.216)	(0.565)
	Wage-setting coordination	0.0421	1.398**				1.944
		(0.272)	(0.711)				(1.648)
	Level wage bargaining	-0.0611		2.452***			2.212
		(0.299)		(0.776)			(2.792)
	Union density	-0.00258			0.0194		0.0626
		(0.00797)			(0.0204)		(0.0611)
	Adjusted bargaining coverage	-0.00172				0.0560**	-0.0394
		(0.00906)				(0.0228)	(0.128)
Constant		0.883*	-3.677	-9.471***	0.543	-5.433*	-21.06**
		(0.473)	(3.547)	(3.546)	(1.522)	(2.965)	(10.08)
Observations		119	119	115	119	115	115
χ^2		0.787	785.1	8708	650.6	677.0	---
p-value		0.94	0.00	0.00	0.00	0.00	---
Pseudo-R^2		0.01	0.47	0.49	0.45	0.47	0.49
Log-Likelihood		-68.87	-37.17	-34.60	-39.02	-35.78	-34.05

Annex 6: Robustness of the meta-analysis results to the inclusion of the Maryland Scale

As indicated in the main text, each study was classified in one of the 5 categories of the Maryland scale, depending on the design of the assessment of the intervention. To be precise, the main element to assign each study in the corresponding level was the econometric methodology used for the assessment. As a consequence, there is a clear correspondence between the level assigned to each evaluation in the Maryland scale and the variable defined in the meta-analysis dataset to account for the econometric methodology. This association is not perfect since, for instance, two evaluations obtained by applying D-i-D may differ in the consideration of a proper untreated comparison group (key distinction between levels 2 and 3). As a robustness check, variables accounting for the level of each evaluation in the Maryland scale were included in the different specifications. Tables A5.1 to A5.4 summarise the results.

As a first step, Table A5.1 shows the results of fitting an ordered probit model to the levels of the Maryland scale in each evaluation, using the characteristics of the design of the study as determinants. It is clearly observed that the corresponding coefficients are jointly highly significant. In fact, most of them are significant at 1 percent level. In particular, as expected the type of econometric method is crucial to distinguish between the level of each evaluation in the Maryland scale.

For each of the models used in the meta-regression analysis, Tables A5.2 to A5.4 report in the first two columns the results for the specifications that only includes the Maryland scale indicator and this indicator plus the controls for differences in the design. It can be observed that the contribution of this variable is negligible, particularly when the controls for the design are included. The following columns show the results for the inclusion of the Maryland scale indicator in the specification that includes the characteristics of the policy intervention and the full set of controls. Results are provided for the specification that includes the general target groups and for those corresponding to the specific target groups. The estimation of the models that exclude the Maryland scale indicator is reproduced to easy comparisons. In brief, in all cases the specifications that include the dummies for the econometric method are preferred to those that substitute these variables for those controlling for differences in the Maryland scale. The information criteria (AIC and BIC) for the former are lower than for the latter, whereas the Wald test for the significance of the coefficients of the Maryland scale in the specifications that also include the controls for the econometric method, does not reject the null hypothesis in all cases. It can also be observed that the inclusion of the Maryland scale indicator to the most comprehensive specification does not modify the estimate of the coefficients of the policy characteristics and the different controls. The only exception is, as expected, the change observed in the parameters of the econometric method. The high correlation between the two indicators affects the precision of the estimates of the corresponding parameters.

Overall, results of this robustness check suggest that the Maryland scale indicator should not be included as an additional control in the meta-regressions reported and discussed in the main text.

Table A6.1: Maryland scale as a function of the design characteristics

Design (data, method, etc.)		
Data frequency	Low frequency	1.702***
		(0.442)
	Undated	1.717***
		(0.654)
Data source	Survey	-0.199
		(0.435)
Econometric method	Matching	-2.117***
		(0.497)
	Other	-5.364***
		(0.927)
	Regression discontinuity	-0.309
		(0.973)
Outcomes	Employment and wages	-0.737*
		(0.431)
Number years analysed		0.0466
		(0.0546)
Time horizon assessed	Long-run	2.136***
		(0.499)
	Medium-run	2.143***
		(0.491)
Observations		207
χ^2		110.6
p-value		0.00
Pseudo-R^2		0.611
Log-Likelihood		-51.78

Notes: *Model is an ordered probit, fit to ordinal data with value 1 for Level 2, 2 for Level 3, and 3 for Level 4 of the Maryland scale. *** p<0.01; ** p<0.05; * p<0.1. Standard errors clustered by study in parentheses. Omitted categories are: High frequency, Administrative data, D-i-D, Only employment, and Short-run.*

Table A6.2: Robustness to inclusion of Maryland scale (probit models for positive versus non-positive impact)

				Policy intervention					
Type of reform	Employer incentives			0.445	0.799	0.626	-0.137	0.489	0.138
				(0.469)	(0.553)	(0.553)	(0.548)	(0.531)	(0.645)
	Other			-0.302	0.0899	-0.169	-0.140	0.358	-0.0555
				(0.438)	(0.422)	(0.496)	(0.572)	(0.530)	(0.604)
	Payroll cost			-0.384	-0.0116	-0.350	-0.109	0.554	-0.0336
				(0.555)	(0.546)	(0.627)	(0.625)	(0.574)	(0.671)
Direction	Increase			0.353	-0.152	-0.0817	0.605	0.726	0.425
				(0.647)	(0.628)	(0.756)	(0.766)	(0.723)	(0.754)
Duration	Permanent			-0.180	-0.736*	-0.141	0.183	-0.683	0.0844
				(0.399)	(0.391)	(0.397)	(0.555)	(0.428)	(0.551)
Scope	Single reform			0.441	0.301	0.513	-0.367	-0.200	-0.287
				(0.331)	(0.284)	(0.339)	(0.366)	(0.295)	(0.395)
Target	Group of firms			-1.741**	-1.080*	-1.453**			
				(0.716)	(0.627)	(0.717)			
	Group of workers			1.285***	1.588***	1.374***			
				(0.429)	(0.514)	(0.492)			
	Unemployed						0.196	0.263	0.152
							(0.433)	(0.382)	(0.415)
	Long-term						1.019*	1.337***	0.920
							(0.528)	(0.480)	(0.570)
	Fixed-term						2.073*	0.989	1.694
							(1.064)	(0.786)	(1.068)
	Young						-0.0984	-0.193	0.00104
							(0.305)	(0.295)	(0.285)
	Old						0.509	0.354	0.454
							(0.384)	(0.331)	(0.377)

Target	Women						0.620**	0.463	0.708**
							(0.314)	(0.369)	(0.314)
	Disabled						0.573	-0.117	0.294
							(0.843)	(0.785)	(0.821)
	Low-skilled						0.668	1.033*	0.719
							(0.459)	(0.560)	(0.483)
Design (data, method, etc.)									
Data frequency	Low frequency		-0.729*	-0.657*	-0.411	-0.619*	-0.984***	-0.883**	-1.031***
			(0.376)	(0.376)	(0.480)	(0.374)	(0.381)	(0.388)	(0.388)
	Undated		-0.654***	-0.907***	-0.271	-0.841**	-0.554	-0.632	-0.550
			(0.246)	(0.313)	(0.434)	(0.365)	(0.423)	(0.404)	(0.480)
Data source	Survey		-0.453**	-0.587**	-1.237***	-0.709**	-0.420	-0.907***	-0.590*
			(0.206)	(0.271)	(0.305)	(0.282)	(0.306)	(0.240)	(0.317)
Econometric method	Matching		0.559*	0.812*		0.522	0.685*		0.503
			(0.326)	(0.429)		(0.434)	(0.367)		(0.403)
	Other		-1.284**	-0.789		-2.022***	-1.222**		-2.244**
			(0.571)	(0.480)		(0.758)	(0.559)		(0.962)
	Regression discontinuity		-1.283***	-1.582***		-2.044***	-1.472***		-1.842***
			(0.443)	(0.436)		(0.561)	(0.439)		(0.630)
Outcomes	Employment and wages		-0.285	-0.727**	-0.788**	-0.717**	-0.226	-0.284	-0.218
			(0.218)	(0.317)	(0.396)	(0.359)	(0.365)	(0.338)	(0.397)
Number years analysed			-0.0470	-0.0905*	-0.0386	-0.0859*	-0.0993*	-0.0379	-0.0907*
			(0.0457)	(0.0508)	(0.0502)	(0.0503)	(0.0529)	(0.0556)	(0.0507)
Time horizon assessed	Long-run		-0.542	-1.109**	-0.373	-0.815**	-1.111**	-0.444	-0.844*
			(0.340)	(0.458)	(0.375)	(0.410)	(0.518)	(0.428)	(0.500)
	Medium-run		-0.555**	-0.870***	-0.589**	-0.626**	-0.858***	-0.812***	-0.642**
			(0.248)	(0.290)	(0.256)	(0.304)	(0.298)	(0.289)	(0.326)

Characteristics of the study									
Type of publication	Other			-0.925*	-0.865	-0.918*	-0.547	-0.521	-0.626
				(0.487)	(0.543)	(0.490)	(0.545)	(0.590)	(0.542)
	Report			0.645	0.387	0.154	1.281**	1.173**	0.900
				(0.453)	(0.535)	(0.488)	(0.519)	(0.507)	(0.560)
	WP			0.589*	0.565	0.626*	0.486	0.599*	0.552*
				(0.334)	(0.417)	(0.338)	(0.309)	(0.346)	(0.327)
Language	English			0.115	0.117	-0.112	0.481	0.682	0.259
				(0.492)	(0.494)	(0.446)	(0.454)	(0.479)	(0.458)
Context – Macroeconomic and labour market institutions									
Macroeconomic indicators	GDP growth			0.260***	0.228***	0.225***	0.229***	0.180***	0.191***
				(0.0612)	(0.0669)	(0.0635)	(0.0625)	(0.0548)	(0.0634)
	Unemployment rate			-0.0329	-0.0692	-0.0333	-0.0104	-0.0263	0.0137
				(0.0621)	(0.0631)	(0.0713)	(0.0710)	(0.0639)	(0.0818)
	Wage-setting coordination			0.0434	0.163	0.0397	-0.138	0.0800	-0.0435
				(0.357)	(0.401)	(0.331)	(0.425)	(0.376)	(0.378)
	Level wage bargaining			-0.330	-0.510	-0.450	0.317	-0.213	0.0523
				(0.549)	(0.580)	(0.530)	(0.694)	(0.582)	(0.672)
	Union density			-0.00735	-0.00721	-0.00686	-0.00311	-0.00278	-0.00138
				(0.00938)	(0.00851)	(0.0112)	(0.00898)	(0.00818)	(0.00977)
	Adjusted bargaining coverage			0.0181	0.0129	0.0188	-0.00379	0.000562	0.000253
				(0.0148)	(0.0155)	(0.0141)	(0.0192)	(0.0157)	(0.0182)
Level 3 – Maryland		0.0277	-0.796*		0.279	-1.428**		0.410	-1.389
		(0.357)	(0.478)		(0.363)	(0.713)		(0.356)	(0.990)
Level 4 – Maryland		-1.084**	-0.262		-2.002***	-1.392		-1.056*	-1.102
		(0.521)	(0.637)		(0.685)	(0.945)		(0.568)	(1.125)
Observations		207	207	198	198	198	198	198	198
$\chi 2$		6.688	64.69	176.0	212.8	255.6	649.5	249.2	729.9
p-value		0.0353	3.11e-09	0	0	0	0	0	0

Pseudo-R2		0.0120	0.182	0.354	0.282	0.364	0.329	0.271	0.336
Log-Likelihood		-138.1	-114.3	-86.05	-95.62	-84.66	-89.32	-97.03	-88.38
AIC				230.1	247.2	231.3	248.6	262.1	250.8
BIC				325.5	339.3	333.3	363.7	373.9	372.4
χ2 Maryland					12.95	4.250		7.962	1.968
p-value					0.00154	0.119		0.0187	0.374

Notes: *Models are probits, fit to binary data with value 1 for significant positive estimates, and 0 for negative and non-significant estimates. *** p<0.01; ** p<0.05; * p<0.1. Standard errors clustered by study in parentheses. AIC and BIC denote the Akaike and Bayesian information criteria, and χ^2 Maryland a Wald test of the joint significance of the Maryland scale coefficients. Omitted categories are: SSC, Decrease, Temporary, Comprehensive package, No target group, High frequency, Administrative data, D-i-D, Only employment, Short-run, CEE, Journal article, Other than English, Level 2 – Maryland.*

Table A6.3: Robustness to inclusion of Maryland scale. Ordered probit models for degree of the impact

		Policy intervention							
Type of reform	Employer incentives			-0.158	0.229	-0.196	-0.766	-0.148	-0.785
				(0.460)	(0.506)	(0.487)	(0.507)	(0.457)	(0.525)
	Other			-0.646	-0.325	-0.726	-0.572	-0.114	-0.595
				(0.443)	(0.433)	(0.473)	(0.543)	(0.526)	(0.566)
	Payroll cost			-0.598	-0.418	-0.664	-0.460	0.0984	-0.471
				(0.541)	(0.556)	(0.567)	(0.575)	(0.559)	(0.586)
Direction	Increase			0.389	0.0585	0.390	0.332	0.427	0.308
				(0.467)	(0.430)	(0.559)	(0.505)	(0.500)	(0.524)
Duration	Permanent			-0.593*	-0.861**	-0.656*	-0.350	-0.940**	-0.352
				(0.360)	(0.376)	(0.358)	(0.467)	(0.395)	(0.484)
Scope	Single reform			-0.159	-0.207	-0.178	-0.960***	-0.769***	-0.962***
				(0.330)	(0.275)	(0.328)	(0.292)	(0.257)	(0.295)
Target	Group of firms			-1.913**	-1.489***	-1.939***			
				(0.758)	(0.533)	(0.728)			
	Group of workers			0.971**	1.340***	1.063**			
				(0.438)	(0.439)	(0.434)			
	Unemployed						0.549	0.497	0.549
							(0.369)	(0.360)	(0.367)
	Long-term						0.939**	1.341***	0.956**
							(0.407)	(0.418)	(0.442)
	Fixed-term						3.354***	2.283***	3.368***
							(1.077)	(0.775)	(1.057)
	Young						-0.0262	-0.179	-0.0191
							(0.260)	(0.264)	(0.265)
	Old						0.274	0.138	0.288
							(0.308)	(0.275)	(0.317)

Target	Women						0.359	0.223	0.347
							(0.335)	(0.353)	(0.337)
	Disabled						1.033*	0.484	0.989
							(0.592)	(0.622)	(0.630)
	Low-skilled						1.038**	1.265**	1.023**
							(0.523)	(0.597)	(0.521)
Design (data, method, etc.)									
Data frequency	Low frequency		-0.565*	-0.530	-0.366	-0.547	-0.959***	-0.811**	-0.940***
			(0.329)	(0.349)	(0.430)	(0.343)	(0.314)	(0.358)	(0.325)
	Undated		-0.519**	-0.356	0.0176	-0.241	0.114	-0.0679	0.184
			(0.226)	(0.336)	(0.348)	(0.328)	(0.374)	(0.344)	(0.407)
Data source	Survey		-0.369**	-0.768**	-1.250***	-0.850***	-0.644**	-0.946***	-0.684**
			(0.168)	(0.312)	(0.307)	(0.330)	(0.290)	(0.265)	(0.305)
Econometric method	Matching		0.532*	0.639*		0.699*	0.486		0.452
			(0.320)	(0.381)		(0.377)	(0.307)		(0.342)
	Other		-0.853	-0.671		-0.462	-1.188***		-1.282
			(0.578)	(0.461)		(0.755)	(0.446)		(0.791)
	Regression discontinuity		-0.853*	-1.176***		-0.974*	-1.447***		-1.398**
			(0.476)	(0.445)		(0.570)	(0.453)		(0.652)
Outcomes	Employment and wages		-0.241	-0.431**	-0.610*	-0.485**	-0.212	-0.210	-0.216
			(0.184)	(0.215)	(0.316)	(0.227)	(0.268)	(0.296)	(0.271)
Number years analysed			-0.0562	-0.0746*	-0.0563	-0.0697	-0.0705	-0.0347	-0.0676
			(0.0363)	(0.0435)	(0.0411)	(0.0440)	(0.0457)	(0.0465)	(0.0454)
Time horizon assessed	Long-run		-0.354	-0.581**	-0.129	-0.595**	-0.785**	-0.251	-0.749**
			(0.277)	(0.288)	(0.324)	(0.302)	(0.315)	(0.353)	(0.331)
	Medium-run		-0.448*	-0.693***	-0.437*	-0.688***	-0.547**	-0.555**	-0.518*
			(0.243)	(0.236)	(0.239)	(0.258)	(0.276)	(0.266)	(0.312)

Characteristics of the study									
Type of publication	Other			-0.890**	-0.678	-0.928**	-0.493	-0.358	-0.488
				(0.426)	(0.453)	(0.419)	(0.523)	(0.546)	(0.526)
	Report			0.873**	0.696	0.895**	1.196**	1.150**	1.186**
				(0.401)	(0.432)	(0.428)	(0.537)	(0.536)	(0.556)
	WP			0.263	0.416	0.288	0.318	0.481*	0.317
				(0.324)	(0.344)	(0.318)	(0.262)	(0.290)	(0.261)
Language	English			0.322	0.227	0.379	0.766*	0.815*	0.752
				(0.464)	(0.382)	(0.443)	(0.453)	(0.468)	(0.478)
Context – Macroeconomic and labour market institutions									
Macroeconomic indicators	GDP growth			0.192***	0.203***	0.206***	0.206***	0.188***	0.204***
				(0.0531)	(0.0594)	(0.0550)	(0.0552)	(0.0530)	(0.0571)
	Unemployment rate			-0.0223	-0.0647	-0.0216	0.00284	-0.0168	-0.000154
				(0.0563)	(0.0602)	(0.0594)	(0.0667)	(0.0629)	(0.0702)
	Wage-setting coordination			0.233	0.216	0.272	0.321	0.378	0.342
				(0.262)	(0.315)	(0.265)	(0.324)	(0.339)	(0.329)
	Level wage bargaining			-0.354	-0.498	-0.422	-0.172	-0.520	-0.194
				(0.509)	(0.509)	(0.519)	(0.528)	(0.537)	(0.553)
	Union density			-0.00841	-0.00650	-0.00766	-0.00302	-0.00320	-0.00339
				(0.00821)	(0.00892)	(0.00793)	(0.00791)	(0.00851)	(0.00764)
	Adjusted bargaining coverage			0.0149	0.0123	0.0156	0.00266	0.00498	0.00236
				(0.0137)	(0.0143)	(0.0142)	(0.0145)	(0.0144)	(0.0146)
Level 3 – Maryland		0.00290	-0.446		0.499	0.213		0.583*	-0.0795
		(0.321)	(0.450)		(0.340)	(0.617)		(0.330)	(0.572)
Level 4 – Maryland		-0.972*	-0.190		-1.647**	-0.393		-1.079**	-0.368
		(0.529)	(0.688)		(0.640)	(0.883)		(0.497)	(0.836)
Observations		207	207	198	198	198	198	198	198
$\chi 2$		4.534	74.71	163.4	192.7	153.7	459.5	353.4	554.1
p-value		0.104	0	0	0	0	0	0	0

Pseudo-R2		0.00644	0.108	0.219	0.185	0.221	0.231	0.195	0.231
Log-Likelihood		-210.0	-188.5	-158.0	-165.0	-157.8	-155.7	-163.0	-155.6
AIC				376.1	388	379.6	383.4	396.1	387.3
BIC				474.7	483.4	484.8	501.8	511.2	512.2
χ2 Maryland					11.87	0.552		9.079	0.196
p-value					0.00264	0.759		0.0107	0.907

Notes: *Models are ordered probits, fit to ordinal data with value 1 for negative and non-significant estimates, 2 for significant weak positive estimates, and 3 for significant strong estimates. *** p<0.01; ** p<0.05; * p<0.1. Standard errors clustered by study in parentheses. AIC and BIC denote the Akaike and Bayesian information criteria, and χ^2 Maryland a Wald test of the joint significance of the Maryland scale coefficients. Omitted categories are: SSC, Decrease, Temporary, Comprehensive package, No target group, High frequency, Administrative data, D-i-D, Only employment, Short-run, CEE, Journal article, Other than English, Level 2 – Maryland.*

Table A6.4: Robustness to inclusion of Maryland scale – probit models for strong versus weak positive impact

		Policy intervention						
Type of reform	Employer incentives			-2.804***	-1.412*	-2.977***	-13.29***	-5.986***
				(1.019)	(0.850)	(0.998)	(3.424)	(1.263)
	Other			-3.749***	-1.564*	-5.133***	-15.42***	-4.504***
				(1.202)	(0.943)	(1.383)	(4.208)	(1.371)
	Payroll cost			-4.119***	-2.024**	-5.201***	-16.78***	-6.858***
				(1.321)	(0.937)	(1.293)	(4.042)	(1.526)
Direction	Increase			1.577*	0.779	2.846***	5.705**	1.003
				(0.816)	(0.653)	(0.939)	(2.318)	(1.431)
Duration	Permanent			-2.013**	-1.130*	-3.255***	-21.41***	-8.220***
				(0.913)	(0.678)	(1.059)	(5.923)	(3.105)
Scope	Single reform			-1.993**	-1.148***	-2.470***	-16.03***	-6.764***
				(0.833)	(0.431)	(0.727)	(4.377)	(1.573)
Target	Group of firms			-	-	-		
	Group of workers			-1.087	0.957	-0.621		
				(1.078)	(1.031)	(1.250)		
	Unemployed						8.646***	5.050***
							(1.981)	(0.925)
	Long-term						8.641***	4.365***
							(1.814)	(1.099)
	Fixed-term						-	-
	Young						-1.548***	-1.453***
							(0.483)	(0.513)
	Old						-6.470***	-4.367***
							(1.109)	(0.914)
	Women						-2.393***	-2.042***
							(0.158)	(0.347)
	Disabled						9.633**	3.741***
							(4.424)	(1.309)

	Low-skilled						7.235***	4.861***
							(2.734)	(1.522)
Design (data, method, etc.)								
Data frequency	Low frequency		-0.0665	1.031	0.428	-0.249	-5.686*	-1.074
			(0.473)	(0.637)	(0.537)	(1.057)	(3.429)	(1.214)
	Undated		-0.129	1.131	0.678	1.402**	10.49*	1.239
			(0.322)	(0.799)	(0.529)	(0.652)	(5.365)	(0.887)
Data source	Survey		0.0604	0.0939	-0.796*	-0.0429	-3.652**	-0.930
			(0.372)	(0.507)	(0.468)	(0.481)	(1.848)	(0.691)
Econometric method	Matching		0.261	1.934***		4.171***	2.402*	
			(0.377)	(0.698)		(1.030)	(1.288)	
	Other		0.0938	1.197		6.109***	-3.380**	
			(0.749)	(0.881)		(1.794)	(1.636)	
	Regression discontinuity		0.609	2.390**		5.953***	-1.992	
			(0.530)	(1.053)		(1.492)	(1.748)	
Outcomes	Employment and wages		0.0436	-0.638	-0.560	-0.627	1.391	-0.356
			(0.362)	(0.427)	(0.421)	(0.450)	(1.977)	(0.879)
Number years analysed			-0.0684	-0.00945	-0.117	0.0120	2.394***	0.813***
			(0.0503)	(0.0857)	(0.0827)	(0.103)	(0.628)	(0.232)
Time horizon assessed	Long-run		0.315	0.687	0.831	-0.128	-2.646*	-0.339
			(0.429)	(0.743)	(0.652)	(1.073)	(1.464)	(0.863)
	Medium-run		0.143	-0.433	0.100	-1.387**	-2.577*	-0.392
			(0.321)	(0.354)	(0.306)	(0.549)	(1.402)	(0.704)

Characteristics of the study								
Type of publication	Other			0.846	0.652	0.690	5.268**	3.368*
				(1.173)	(0.933)	(1.054)	(2.091)	(1.890)
	Report			2.780***	1.263*	4.299***	30.16***	9.680***
				(0.915)	(0.691)	(1.096)	(7.722)	(3.446)
	WP			-0.0421	0.206	0.671	8.375***	3.616***
				(0.400)	(0.405)	(0.724)	(2.446)	(1.051)
Language	English			2.543***	0.935	4.769***	28.16***	10.98***
				(0.805)	(0.619)	(1.173)	(6.711)	(2.967)
Context – Macroeconomic and labour market institutions								
Macroeconomic indicators	GDP growth			-0.0582	0.0686	0.136	0.810***	0.429***
				(0.0847)	(0.0948)	(0.129)	(0.257)	(0.130)
	Unemployment rate			0.269*	0.0182	0.318**	-1.020*	-0.334
				(0.157)	(0.104)	(0.125)	(0.565)	(0.331)
	Wage-setting coordination			0.788	0.314	0.699	1.944	0.929
				(0.493)	(0.407)	(0.525)	(1.648)	(1.240)
	Level wage bargaining			-1.000	-0.639	-0.957	2.212	-0.916
				(0.839)	(0.698)	(0.780)	(2.792)	(1.866)
	Union density			0.0326**	0.00934	0.0598***	0.0626	0.00150
				(0.0154)	(0.0107)	(0.0170)	(0.0611)	(0.0237)
	Adjusted bargaining coverage			0.0323	0.0163	0.0330	-0.0394	0.0512
				(0.0204)	(0.0201)	(0.0208)	(0.128)	(0.0392)
Level 3 – Maryland		-0.0815	0.155		0.476	4.140***		1.041
		(0.291)	(0.592)		(0.482)	(1.303)		(0.887)
Level 4 – Maryland		-	-		-	-		-
Observations		122	122	118	117	117	115	114
χ^2		0.0783	8.641	36.91	27.21	87.98	---	2353
p-value		0.780	0.655	0.0968	0.346	4.09e-08	---	0
Pseudo-R^2		0.000549	0.0377	0.230	0.167	0.316	0.499	0.452
Log-Likelihood		-71.18	-68.53	-52.35	-56.35	-46.28	-34.05	-37.05
AIC				160.7	164.7	150.6	132.1	138.1
BIC				238.3	236.5	230.7	219.9	225.7

χ^2 Maryland					0.976	10.09		1.378
p-value					0.323	0.00149		0.240

Notes: *Models are probits, fit to binary data with value 1 for significant strong positive estimates, and 0 for significant weak positive estimates. Negative and non-significant estimates excluded. *** p<0.01; ** p<0.05; * p<0.1. Standard errors clustered by study in parentheses. AIC and BIC denote the Akaike and Bayesian information criteria, and χ^2 Maryland a Wald test of the joint significance of the Maryland scale coefficients. Omitted categories are: SSC, Decrease, Temporary, Comprehensive package, No target group, High frequency, Administrative data, D-i-D, Only employment, Short-run, CEE, Journal article, Other than English, Level 2 – Maryland.*

Annex 7: Details on the analysis of the interaction between the type of reform and the group targeted by the policy

Subsection *d* in section 3.2 of the main text presents the results of the meta-regressions that include the interaction between the type of intervention and the target group. It can be argued that a particular policy tool, for instance a change in the employer's SSC, may have a different effect on employment depending on the group of workers targeted by the reform. To accommodate such a situation the meta-regressions had to include the full set of interactions between the four types of reforms considered in the study and, on the one hand, the two groups defined for the general target (a specific group of firms, and a specific group of workers) and, on the other, the eight groups of workers (all the unemployed, long-term unemployed, young, women, etc) for the detailed target. However, there are two circumstances that prevented us from following this strategy. The first one is that adding the full set of interactions increases substantially the number of regressors in the meta-regressions, particularly in the case of those for the detailed targets. This affects the available degrees of freedom for the most comprehensive specifications, while at the same time it increases the total amount of collinearity, which impacts negatively on the estimated confidence intervals. The second causes an even greater distortion in the estimation of the meta-regressions due to the lack of relevant information in the sample when the interactions are included in the specification. This is again particularly the case when the target is defined in terms of the detailed groups of workers. In this case, the sample of evaluations in the dataset does not include enough variability to estimate some of the interaction terms. For example, in the case of the group of workers with a fixed-term contract, the five observations in the dataset correspond to a reform classified as employment incentive, which means that it is not possible to identify the separate effect on employment of the interaction between each of the types of reforms for this specific target group. For other groups, the sample allows us to identify only the effect of some interactions. Still, in some cases, the distribution of the number of observations in each type of reform and target group renders difficult the estimation of the coefficients of interest.

Conditional to these shortcomings, and with the aim of obtaining some insights on the different impact on employment that the alternative type of reforms may have depending on the specific group of workers, we estimate meta-regressions that include the above-mentioned interactions. In all cases, only the interaction between the type of reform and one target group has been considered, as this minimizes the drawbacks discussed above. Results are reported just for the groups for which there was enough variability. In this regard, the analysis was not performed for the case of the distinction between the strong and moderate positive impacts. Removing observations for evaluations with a negative effect decreases the sample size and, correspondingly, variability in the dataset, rendering unfeasible the estimation of the specifications with interactions in this case.

Results are shown in Table A.7.1 for the probit models for the positive versus non-positive impacts and in Table A.7.2 for the ordered probit models specified for assessing the degree of the impact. Only the results for the estimated effect of the type of reform, the target group, and the interaction terms are reported, although the models estimated included all the controls used in the previous sub-sections. Cases in which the coefficient of a particular interaction was not obtained due to lack of enough information in the dataset are denoted by "–". The label of every column indicates the specific group that is interacted with the policy reform.

It can be observed (first column of Table A.7.1) that the negligible effect on the likelihood of a positive impact of a reform targeted to a group of workers, in comparison with an untargeted intervention, does not depend on the type of reform. This is so as none of the coefficients of the interaction between the variable for Group of workers and those for the type of reform is statistically significant. The same applies to the groups of unemployed, long-term unemployed, old, and women workers, but not to those for the young, disabled and low-skilled. Specifically, it seems that employment incentives are more effective than changes in employer's SSC for young workers, whereas the opposite applies for the disabled and low-skilled groups.

The distinction between non-positive, positive but moderate, and positive strong effects reveals additional interesting results for the interactions. Results in the first column of Table A.7.2 indicate that the highly significant negative effect for the Group of firms corresponds completely to the case in which the instrument of the policy is a change in the employer's SSC. It can be observed that when there is a reduction in payroll costs and, particularly, when the reform is implemented through an employment incentive for a specific group of firms, the effect becomes significantly positive. As for the highly significant positive effect derived for the Group of workers in subsection *b* (tables 3.11 and 3.13), results summarized in the second column of Table A.7.2 suggest that they mostly correspond to interventions in the form of employment incentives and reductions in payroll cost, rather than to a decrease in the employer's SSC or in any other type of reform. In other words, these results suggest that the degree of the impact on employment is likely to be higher when the policy is targeted to a group of firms or workers (versus a non-targeted policy) but only if it is implemented through a reduction in payroll costs or by means of an employment incentive, rather than by decreasing the employer's SSC.

Nevertheless, the previous results should be qualified given the evidence on the interaction effects derived from the detailed groups of workers. It can be observed that a positive and significant effect of the interaction is only obtained for the group of young workers, meaning that a substantive employment effect is observed for this group only when the reform is based on an employment incentive. For all other groups, no difference in the impact is observed between employer's SSC and the other types of reforms (old, women, and low-skilled). In some cases, they appear to be less effective in promoting employment than reductions in employer's SSC (unemployed, long-term unemployed, and disabled workers). In any case, as mentioned before these results for the detailed target groups should be taken with caution (note that it was not possible to obtain the estimate of the interaction effect in a large number of cases and that some coefficient estimates are based on a relatively low number of observations).

Overall, results of the analysis of the interactions suggest that different types of reforms may well have differentiated effect depending on the group targeted by the intervention. However, unfortunately a proper specific policy recommendation on the most and less effective types of reforms for each group cannot be derived from the evidence in the database of existing evaluations for the European economies.

Table A7.1: Probit models for positive versus non-positive impact with interactions between type of reform and target group

		Group of workers	Unemployed	Long-term	Young	Old	Women	Disabled	Low-skilled
Type of reform	Employer incentives	-0.933	0.266	-0.149	-0.481	-0.00814	-0.288	-0.0534	-0.0467
		(0.956)	(0.608)	(0.565)	(0.536)	(0.574)	(0.520)	(0.491)	(0.544)
	Other	-0.370	-0.307	-0.00761	-0.460	0.0610	-0.295	-0.122	-0.313
		(0.794)	(0.515)	(0.535)	(0.478)	(0.559)	(0.527)	(0.508)	(0.522)
	Payroll cost	-0.577	0.0198	-0.264	-0.611	-0.339	-0.357	-0.468	-0.579
		(0.745)	(0.445)	(0.460)	(0.487)	(0.457)	(0.450)	(0.451)	(0.522)
Target	Group of firms	-1.626**							
		(0.814)							
	Group of workers	0.502							
		(0.878)							
	Unemployed		1.069**	0.351	0.263	0.321	0.475	0.323	0.148
			(0.541)	(0.399)	(0.418)	(0.402)	(0.398)	(0.385)	(0.436)
	Long-term		0.919**	0.870	0.657	0.732*	0.833*	0.863*	0.637
			(0.445)	(0.875)	(0.446)	(0.440)	(0.446)	(0.449)	(0.471)
	Fixed-term		2.170**	2.076**	1.794*	1.987**	2.130**	2.124**	1.637*
			(0.952)	(0.911)	(0.936)	(0.903)	(0.941)	(1.023)	(0.893)
	Young		-0.0113	-0.0342	-0.658	0.0990	-0.134	0.0104	0.188
			(0.291)	(0.308)	(0.500)	(0.307)	(0.339)	(0.300)	(0.342)
	Old		0.335	0.493	0.335	0.879	0.399	0.423	0.508
			(0.327)	(0.335)	(0.341)	(1.007)	(0.360)	(0.331)	(0.358)
	Women		0.536*	0.562*	0.376	0.638**	0.0883	0.553*	0.454
			(0.296)	(0.311)	(0.337)	(0.312)	(0.284)	(0.297)	(0.294)
	Disabled		0.721	0.618	0.472	0.703	0.370	2.361**	0.217
			(0.785)	(0.779)	(0.822)	(0.767)	(0.739)	(1.056)	(0.759)
	Low-skilled		0.841*	0.827*	0.620	0.852*	0.749	0.600	1.069
			(0.496)	(0.489)	(0.431)	(0.507)	(0.479)	(0.429)	(0.697)

Interaction	Employer incentives x Target group	1.890	-0.867	-0.0112	1.637**	-0.663	1.474	-2.521**	-1.720**
		(1.188)	(0.720)	(0.992)	(0.712)	(1.180)	(1.058)	(1.084)	(0.700)
	Other x Target group	0.326	0.136	-	-	-	-	-	-
		(1.200)	(0.658)						
	Payroll cost x Target group	0.905	-	-	0.700	0.0213	-	-	0.752
		(0.836)			(0.786)	(1.058)			(1.067)
Observations		207	206	206	207	207	207	207	207
χ^2		758.3	464.1	320.5	431.1	286.6	282.0	258.3	---
p-value		0.00	0.00	0.00	0.00	0.00	0.00	0.00	---
Pseudo-R^2		0.341	0.319	0.308	0.324	0.313	0.317	0.321	0.325
Log-Likelihood		-92.07	-94.61	-96.12	-94.54	-96.02	-95.44	-94.92	-94.35

Table A7.2: Ordered probit models for degree of the impact with interactions between type of reform and target group

		Group of firms	Group of workers	Unemployed	Long-term	Young	Old	Women	Disabled	Low-skilled
Type of reform	Employer incentives	0.0194	-1.674*	-0.614	-0.834	-0.987**	-0.619	-0.729	-0.678	-0.775
		(0.453)	(0.875)	(0.489)	(0.507)	(0.502)	(0.499)	(0.471)	(0.445)	(0.476)
	Other	-0.284	-1.340*	-0.694	-0.447	-0.712	-0.308	-0.435	-0.510	-0.576
		(0.397)	(0.780)	(0.509)	(0.454)	(0.445)	(0.478)	(0.440)	(0.423)	(0.434)
	Payroll cost	-0.308	-2.162***	-0.460	-0.682	-0.742	-0.825*	-0.614	-0.806*	-0.891*
		(0.418)	(0.797)	(0.418)	(0.440)	(0.460)	(0.456)	(0.428)	(0.431)	(0.481)
Target	Group of firms	-5.402***	-1.977**							
		(0.595)	(0.956)							
	Group of workers	1.068***	-0.363							
		(0.397)	(0.861)							
	Unemployed			0.864*	0.698**	0.574*	0.651*	0.699**	0.656**	0.564
				(0.446)	(0.343)	(0.337)	(0.341)	(0.337)	(0.333)	(0.352)
	Long-term			0.841**	0.428	0.641*	0.686**	0.801**	0.804**	0.721**
				(0.340)	(0.726)	(0.368)	(0.343)	(0.361)	(0.349)	(0.358)
	Fixed-term			3.238***	3.123***	2.996***	3.042***	3.154***	3.219***	2.991***
				(0.940)	(0.916)	(0.907)	(0.889)	(0.930)	(1.029)	(0.916)
	Young			-0.0142	-0.0189	-0.436	0.173	-0.0249	-0.0158	0.109
				(0.253)	(0.256)	(0.354)	(0.293)	(0.254)	(0.250)	(0.279)
	Old			0.176	0.296	0.0239	0.417	0.255	0.231	0.298
				(0.289)	(0.282)	(0.284)	(0.741)	(0.279)	(0.288)	(0.287)
	Women			0.262	0.206	0.180	0.388	0.195	0.241	0.190
				(0.328)	(0.342)	(0.289)	(0.300)	(0.283)	(0.322)	(0.320)
	Disabled			1.178*	1.076*	0.961	1.236**	1.116*	2.368**	0.919
				(0.626)	(0.634)	(0.631)	(0.601)	(0.606)	(0.968)	(0.610)
	Low-skilled			0.945**	0.945**	0.805*	1.020**	0.964**	0.803*	1.000
				(0.477)	(0.453)	(0.426)	(0.490)	(0.472)	(0.435)	(0.660)

Interaction	Employer incentives x Target group	3.977***	2.156*	-0.101	0.478	1.085**	-0.495	0.132	-1.872*	-0.792
		(0.784)	(1.104)	(0.593)	(0.820)	(0.502)	(0.828)	(0.526)	(1.131)	(0.695)
	Other x Target group	-	1.243	0.423	-3.447***	-	-	-	-	-
			(1.007)	(0.578)	(0.774)					
	Payroll cost x Target group	1.053*	2.318**	-5.408***	-	-0.0342	0.703	-	-	1.013
		(0.576)	(0.905)	(0.713)		(0.635)	(0.866)			(0.842)
Observations		207	207	207	207	207	207	207	207	207
χ^2		2380	1428	861.2	732.1	421.2	364.7	325.5	271.9	---
p-value		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---
Pseudo-R^2		0.206	0.215	0.223	0.218	0.225	0.220	0.216	0.221	0.221
Log-Likelihood		-167.7	-165.8	-164.1	-165.3	-163.8	-164.8	-165.6	-164.6	-164.6

EF/16/48/EN 2