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Institutional arrangements regarding Minimum Wage Setting in 195 countries

Kea G. Tijdens

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Abstract

ILO Conventions C026 and C131 challenge countries to implement minimum wage-fixing mechanisms. How many countries do have a statutory minimum wage ((S)MW)? How many apply differentiated MWs? How many set MW by Collective Bargaining (CB)? And how many do not have either of these? This paper addresses these four questions. On this behalf we merged 12 databases with information about MW fixing mechanisms and their coverage (Eurofound, ICTWSS, five ILO databases, MACHequity, three WageIndicator databases, WorldBank). They vary regarding years and countries covered and characteristics coded. Europe and Latin America were best represented, co Oceania least. The merged database includes information about 195 countries for five years (2011 – 2015). Clearly, the absence of a single institution responsible for collecting MW policies and rates impedes producing adequate worldwide overviews. Against this backdrop we present and discuss outcomes of our inventory.

Based on the harmonised database (97 countries with data covering all five years) we found that between 2011 and 2015 the percentage of countries with a SMW policy increased from 92% to 94%. According to the merged database (all 195 countries) between 75% and 93% of these countries applied a MW-fixing mechanism in at least one year.

If a differentiated MW is defined as covering part of the dependent labour force only data is available for OECD countries and some others, indicating that 15% of the 48 countries at stake applied a partial minimum wage. If a differentiated MW is defined as covering the entire dependent labour force though with varying rates, a database of 76 countries with a SMW allowed to conclude that 53% applied differentiated MWs. Most breakdowns were by industry, followed by geographical areas and occupation. We found that countries with multiple MWs tend to mimic CB outcomes.

Using the merged database we found that less than 3% of developing countries applied MW fixing through CB. Across Europe this share was considerably higher but decreasing. We detailed the underlying changes. Finally, we studied which countries recently did not have a MW; this was the case (over at least three years) for 16 countries.

1 Introduction

This paper reviews databases that classify country-level policies for determining minimum wage levels. These policies date back to 1928, when the General Conference of the International Labour Organisation (ILO), a United Nations organisation, adopted the Minimum Wage-fixing Machinery Convention (Convention No. 26).¹ According to the Convention each ratifying member will take the measures to ensure that the employers and workers concerned are informed of the minimum rates of wages in force and that wages are not paid at less than these rates in cases where they are applicable. In 1970, this convention was specified to greater detail in the Minimum Wage-fixing Convention (Convention No. 131). This convention proposes that 'Minimum wages shall have the force of law and shall not be subject to abatement, and failure to apply them shall make the person or persons concerned liable to appropriate penal or other sanctions ... When determining the level of Minimum wages, this shall include as far as possible and appropriate in relation to national practice and conditions, the needs of workers and their families, taking into account the general level of wages in the country, the cost of living, social security benefits, and the relative living standards of other social groups, as well as economic factors'.² By the end of 2015, Convention No. 26 had been ratified by 104 countries and Convention No. 131 by 52 countries.³

Today most countries in the world have country-level policies concerning their minimum wage-fixing machinery, though the number of ratifying countries may suggest otherwise. Across countries such minimum wage-fixing policies vary widely, and therefore it becomes important to have adequate classifications of these policies. Several databases – we found twelve – classify countries according to their minimum wage policies, specifically their minimum wage-fixing mechanisms and their minimum wage-fixing coverage. The former indicates whether the minimum wages are set by Law, by Collective Bargaining or any policy in between, the latter whether the minimum wages cover the labour force at large or only sections within the labour force.

The aim of this paper is twofold. First we compare the twelve databases to explore whether countries are classified similarly across the databases concerning their minimum wage-fixing mechanisms and to what extent they identify the minimum wage-fixing coverage. Second we aim to generate a database of minimum wage-fixing mechanisms for as many countries as possible, using the greatest common divisor for the years studied.

The twelve databases vary with respect to the years covered, the countries covered and the characteristics coded. The years covered range from 1960 to 2015, though the majority of databases only included data from the 2010s. Therefore we restricted our analysis to the years 2011 to 2015. The topics covered varied, as will be explained in Section 2. The number of countries covered in these databases range from 29 to 189. We included all countries in the analysis, totaling to 195 countries. It should be noted that, although ILO's NATLEX database contains legal text for 196 countries,

1 See http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312171, accessed 30SEP2016

2 See http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312276:NO, accessed 30SEP2016

3 For C026 see http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11300:0::NO:11300:P11300_INSTRUMENT_ID:312171:NO.
For C131 see http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11300:0::NO:11300:P11300_INSTRUMENT_ID:312276:NO

including minimum wage regulations for some countries, this text is not coded and therefore we could not use it in this paper.⁴ Appendix 7.1 has a list of the 195 countries by database.

The twelve databases will be discussed in detail in the next section, but they are listed here:

1. Eurofound's EURWORK database on wages, working time and collective disputes, version 1.0 (Eurofound 2016)⁵
2. ICTWSS database version 5.1. from AIAS/University of Amsterdam⁶
- 3-7. Five ILO Databases:
 - ILO members & ratification of C026 and C131 (ILO_ratification)
 - ILO Database from Working Conditions Laws Report 2012 (ILO_MWmechanisms)
 - ILO Database from Working Conditions Laws Report 2012 (ILO_MWcoverage)
 - ILO General Survey for International Labour Conference (ILO_survey 2014)
 - ILO Global Wage Database (ILO_GWD)
8. MACHEquity⁷
- 9-11. Three WageIndicator Databases:
 - WageIndicator Labour Law Database (WageIndicator_Law)⁸
 - WageIndicator Minimum wages Database 2012 (WageIndicator_MWmechanisms)
 - WageIndicator Minimum wages Coverage Database 2015 (WageIndicator_coverage)⁹
12. World Bank Labour Market Regulation Database (WorldBank_db)

Note that this paper does not review minimum wage rates as the outcomes of minimum wage policies (e.g. Belser and Sobek 2012; Van Klaveren *et al.* 2015; Varkkey *et al.* 2016). Hence, databases with information about the relationship between a country's minimum and median/average wages (Kaitz indices) are reviewed in this paper. Appendix 7.2 contains a list of most important databases with minimum wage rates.

The outline of this paper is as follows. Section 2 reviews the twelve databases with information on minimum wage policies. Section 3 describes the merged dataset that we generated from these twelve databases. Section 4 presents the results of the comparisons of the minimum wage-fixing mechanisms while Section 5 does so for the minimum wage-fixing coverage. Section 6 presents the results.

4 See http://www.ilo.org/dyn/natlex/natlex4.home?p_lang=en , accessed 24AUG2016

5 See <https://www.eurofound.europa.eu/database-of-wages-working-time-and-collective-disputes>, accessed 21SEP2016

6 See <http://www.uva-aias.net/nl/ictwss> , accessed 21SEP2016

7 See <http://MACHEquity.com/data-center-2/> , accessed 29SEP2016

8 See <http://www.wageindicator.org/main/labour-laws/decent-work-map> , accessed 21SEP2016

9 See <http://www.wageindicator.org/main/salary/minimum-wage> , accessed 21SEP2016

2 The twelve databases on Minimum wage-fixing

2.1 EURWORK database

Since 2016 Eurofound¹⁰ maintains the EURWORK database. The EURWORK database on wages, working time and collective disputes, version 1.0, identifies industrial relations characteristics for the period 2000 – 2015 and covers 29 countries (EU28 and Norway). It is partly a continuation of the ICTWSS database, discussed in the next section. EURWORK includes two variables identifying the minimum wage-fixing mechanisms and two identifying the minimum wage-fixing coverage (Table 1). For our comparison we used data from these four variables for the 29 countries and the years 2011 to 2015.

Table 1 Four variables concerning Minimum wage setting in the EURWORK Database

Minimum wage-fixing mechanisms	
EURWORK_MWDet: Who determines/agrees on/proposes the level of the Minimum wage (increase)?	
YEARS COVERED: 2011, 2012, 2013, 2014, 2015	
1	Government alone
2	Government jointly with social partners (i.e via tripartite negotiations)
3	Government following individual or joint proposals of social partners
4	Recommendations from judges or expert committee, as in award-system
5	Social partners in bilateral negotiations
EURWORK_MWSet: How is the Minimum wage implemented?. YEARS COVERED: 2011, 2012, 2013, 2014, 2015	
1	Ministerial decree or law (i.e. "statutory Minimum wages")
2	Collective agreement
3	Non-binding recommendation
4	Other
Minimum wage-fixing coverage	
EURWORK_NMW: Is there a statutory Minimum wage in your country?	
YEARS COVERED: 2011, 2012, 2013, 2014, 2015	
1	Statutory national (cross-sectoral or inter-occupational) Minimum wage exists.
2	Statutory minimum wage in some sectors (occupations, regions/states) only.
3	No statutory minimum wage
EURWORK_floor: Universal wage floor. YEARS COVERED: 2011, 2012, 2013, 2014, 2015	
Yes/No	Is the Minimum wage universally binding in the whole economy (for the whole labour force?)

10 See <https://www.eurofound.europa.eu/nl> , accessed 29AUG2016

2.2 ICTWSS database

The ICTWSS database is maintained by University of Amsterdam/AIAS, and designed by Jelle Visser, former director of AIAS.¹¹ The database covers four key elements of modern political economies: trade unionism, wage setting, state intervention and social pacts (Visser, 2015). It contains annual data from 1960 till 2014. The database covers 51 countries, notably all current OECD and EU member states: Australia, Austria, Belgium, Bulgaria, Canada, Chile, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Germany, Greece, Finland, France, Hungary, Iceland, Ireland, Israel, Italy, Japan, The Republic of Korea (South), Latvia, Lithuania, Luxembourg, Malta, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Spain, Slovakia, Slovenia, Sweden, Switzerland, Turkey, the United Kingdom, and the United States of America – with some additional data for the emerging economies Argentina, Brazil, China, India, Indonesia, Russian Federation, South Africa, Malaysia, the Philippines and Singapore. ICTWSS has two variables concerning minimum wage-fixing (Table 2). For our comparison, we used information about the two variables from the 51 countries for 2011 to 2014.

Table 2 Two variables concerning Minimum wage setting in the ICTWSS database version 5.1, 1960-2014

Minimum wage-fixing mechanisms	
ICTWSS_mechanisms: Minimum wage setting (nms). YEARS COVERED: 2011, 2012, 2013, 2014	
0	No statutory Minimum wage, no sectoral or national agreements
1	Minimum wages are set by (sectoral) collective agreement or tripartite wage boards in (some) sectors
2	Minimum wages are set by national agreement (autonomous agreement) between unions and employers
3	National Minimum wage is set by agreement (as in 1 or 2) but extended and made binding by law or Ministerial decree
4	National Minimum wage is set through tripartite negotiations
5	National Minimum wage is set by government, but after (non-binding) tripartite consultations
6	Minimum wage set by judges or expert committee, as in award-system
7	Minimum wage is set by government but government is bound by fixed rule (index-based Minimum wage)
8	Minimum wage is set by government, without fixed rule
Minimum wage-fixing coverage	
ICTWSS_levels: National Minimum wage (nmw). YEARS COVERED: 2011, 2012, 2013, 2014	
0	No statutory Minimum wage
1	Statutory Minimum wage in some sectors (occupations, regions/states) only
2	Statutory national (cross-sectoral or inter-occupational) Minimum wage exists

2.3 Five ILO Minimum wages databases

As outlined in Section 1, we use five ILO Databases. The first is the ILO Ratification database (abbreviated as: ILO_ratification). The ILO Ratification database is a list of all ILO members in the years 2011 – 2015 specifying which members had ratified either of the Conventions in these years (Table

¹¹ See <http://www.uva-aias.net/en/ictwss> , accessed 29AUG2016

3). By the end of 2015 ILO Convention No. 26 had been ratified by 104 member countries and Convention No. 131 by 52 members. At that time ILO had 186 members.¹²

The second database is the ILO survey database (ILO_survey). In March 2012 the Governing Body of the ILO decided that the General Survey to be submitted to the 2014 session of the International Labour Conference would address the Minimum Wage-fixing Convention, 1970 (No. 131), and the Minimum Wage-fixing Recommendation, 1970 (No. 135). On this behalf 102 member states with a minimum wage policy were surveyed about their Minimum Wage-fixing Machinery, resulting in a publication on minimum wage systems (ILO 2014, Ch 3, pp 49-67). Note that this report does not include countries without a minimum wage. This ILO publication assigns countries with a minimum wage policy to four categories, but these categories are not mutually exclusive as countries could be assigned to two or even three categories (Table 3). Our second ILO database is extracted from this ILO 2014 publication, it has four variables, covers 102 countries and – although the publication does not provide clarity about the year surveyed - we assume the year 2014.

The third ILO database is generated from the ILO Global Wage Database (ILO_GWD), covering the years 2003 to 2015,¹³ indicating the statutory nominal gross monthly minimum wage effective Dec. 31st. The database only indicates countries with a minimum wage, not those without so. For 2011 the database has information for 106 countries, but is not updated equally across countries, with the latest update years ranging from 2011 until 2015. Hence, the number of countries included drop to 22 in 2015. We classified the countries for the years without information as having insufficient data.

The ILO Working Conditions Laws Report 2012 contains a chapter about minimum wages and includes two tables of relevance to our report. Table 9 in the report classifies countries in six categories of minimum wage-fixing mechanisms, including 'no Minimum wage'.¹⁴ Table 10 in the report classifies countries by their Minimum wage-fixing levels in five categories, including 'no Minimum wage'.¹⁵ We call these the ILO_MWmechanisms and ILO_MWcoverage database respectively. The countries do not fully overlap, as four countries have valid values only for ILO_MWmechanisms, whereas three countries have so only for ILO_MWcoverage. We generated our fourth and fifth ILO database holding information from 153 respectively 152 countries both covering the year 2012 (Table 3).¹⁶

12 See <http://www.ilo.org/public/english/standards/relm/country.htm> , accessed 23OCT2016. Unfortunately, no list of ILO members is available detailing the entry date of the membership. For the years 2011 – 2015 we reconstructed entry dates from ILO press releases concerning new members.

13 See http://www.ilo.org/ilostat/faces/wcnav_defaultSelection?_afLoop=1249002300530291&_afWindowMode=0&_afWindowId=null#!%40%40%3F_afWindowId%3Dnull%26_afLoop%3D1249002300530291%26_afWindowMode%3D0%26_adf.ctrl-state%3D19s68wpgdo_59 , accessed 5JAN2017

14 Based on Table 9 in ILO WORKING CONDITIONS LAWS REPORT 2012, page 60.

15 Based on Table 10 in ILO WORKING CONDITIONS LAWS REPORT 2012, page 63.

16 Note that the three ILO databases only partially overlap: 13 countries are in ILO_survey but not in either of the 2012 databases, whereas 69 countries are not in ILO_survey but in either of the 2012 database. 89 countries are in all three ILO databases.

Table 3 Variables concerning Minimum wage-fixing in five ILO Databases

Minimum wage-fixing mechanisms	
ILO_ratification: Ratification of Conventions database. YEARS COVERED: 2011, 2012, 2013, 2014, 2015	
Yes/No	C029
Yes/No	C131
ILO_survey: General Survey for International Labour Conference. YEARS COVERED: 2014	
MWbyLaw	Minimum wages fixed by the public authorities without consultation with the social partners
MWbyLawafterCons	Minimum wages fixed by the public authorities after consultation with the social partners
MWonTripartiteBasis	Minimum wages fixed on a tripartite basis
MWbyCollBarg	Minimum wages fixed by collective bargaining
ILO_GWD: ILO Global Wage Database. YEARS COVERED: 2011, 2012, 2013, 2014, 2015	
1	Minimum wage policy
-8	Insufficient data
ILO_MWmechanisms: Database from Working Conditions Laws Report. YEARS COVERED: 2012	
1	Government alone
2	Government upon consultation of the social partners
3	Government following the recommendation/ consultation of a specialized body
4	Collective bargaining/social partners
5	Specialized body
6	No Minimum wage
Minimum wage-fixing coverage	
ILO_MWcoverage: Database from Working Conditions Laws Report. YEARS COVERED: 2012	
1	National
2	Regional
3	National by sector and/or occupation
4	Regional by sector and/or occupation
5	No Minimum wage

2.4 MACHEquity Database

The MACHEquity Database is maintained by McGill University in Canada. The database has information about minimum wage rates for 121 developing countries for the years 1999 to 2013. The database used information from the ILO Global Wage Database, but where missing information was added from other sources. It has one variable concerning minimum wage-fixing (Table 4). The database has not registered this variable per year, but has one variable covering the whole period, and countries with a policy change have been classified as 'MW policy change' without indicating in which year the policy change took place. The database has information about 117 countries, of which 11 with a policy change. Hence, MACHEquity covers 106 countries for the years 2011-2013.

Table 4 One variable concerning Minimum wage-fixing in the MACHEquity Database, 1999 - 2013

Minimum wage-fixing mechanisms.	
MACHEquity database. YEARS COVERED: 2011, 2012, 2013	
0	No minimum wage policy
1	Minimum wage policy, all years
2	Minimum wage set by collective bargaining
3	Policy exists, but minimum wage level not set
4	Indeterminate policy
-8	Minimum wage policy change

Source: MACHEquity, no year; see also Appendix 7.4.

2.5 Three WageIndicator Databases

WageIndicator Foundation provides three databases for this paper. The first is the WageIndicator Minimum wages Database 2012 (WageIndicator_ MWmechanisms), including a binary variable yes/no official minimum wage for 65 countries. The database was prepared for WageIndicator for its policy to provide a lottery prize to the respondents of its web survey, notably the amount of a weekly or a monthly minimum wage, depending on the GDP of the country.¹⁷

The second is the WageIndicator Labour Law Database (WageIndicator_Law). This one started in 2008 and initially was populated with text only, for the purpose of presenting labour law in an accessible way to web visitors of the WageIndicator websites. Gradually it developed as a well-structured system that sorts a number of labor laws into specific categories – for example, placing laws on contracts, work termination and severance in an Employment Security section (Ahmad 2015). This has the twofold benefit that it provides relevant information for web visitors and that it allows for cross-reference of labor laws between countries. The streamlined system also makes it easier to update labor laws when they are amended. By 2015 Iftikhar Ahmad, WageIndicator’s Global Labour Law Database manager, had populated the database for 151 countries, using information from governmental websites (Ahmad 2016). The database is not downloadable, but it can be viewed in world maps.¹⁸ For the purpose of this report the database was transferred to the author. The database has one variable related to minimum wage-fixing (Table 5). The database covers 2015 for 151 countries, of which 120 countries with valid values.

¹⁷ The database was prepared by Maarten van Klaveren, senior researcher at University of Amsterdam/AIAS.

¹⁸ See <http://www.wageindicator.org/main/labour-laws/decent-work-map> , accessed 24AUG2016

Table 5 Variable concerning Minimum wage-fixing in two WageIndicator databases

Minimum wage-fixing mechanisms	
WageIndicator_ MWmechanisms: Minimum Wage-fixing mechanisms. YEARS COVERED: 2012	
0	No official minimum wage
1	Yes official minimum wage
WageIndicator_Law: WageIndicator Labour Law database. YEARS COVERED: 2015	
A	Set By Law
B	Set By Collective Bargaining
E	No Clear Provision
Z	Insufficient Data

The third database is the Minimum Wages Database (abbreviated as WageIndicator_coverage) of WageIndicator Foundation. This database has minimum wage information for many countries around the world (Tijdens and Metha 2016). This information is published on the minimum wage pages in the national WageIndicator websites in 85 countries, of which 8 do not have a statutory minimum wage. The web pages provide valuable information for web visitors, mainly because governments or wage boards typically are better in decision-making than in communicating their decisions to a wide audience. For five countries - China, Sri Lanka, Pakistan, India and Zimbabwe - the Database does not include the minimum wage rates, due to very the complex structure of their minimum wage rates.

Although predominantly designed to register minimum wage rates, this database has a unique feature as it provides information about minimum wage-fixing coverage that cannot be traced through the databases mentioned previously. In case of multiple minimum wage rates this database allows to explore by which characteristics the rates are specified. Breakdowns for nine characteristics are featured in this database, notably by industry, firm size, occupational group, skill level, educational level, grade, geographical characteristics, age, and years of service (Table 6). The coding scheme has an extensive set of questions aiming to specify these characteristics in greater detail. For our analysis we used the monthly database dump of June 2016, which included minimum wage rates applicable in the years 2015 and 2016. The database holds information for 76 countries, of which 36 have a single minimum wage rate and the remaining 40 have multiple rates.

Table 6 Nine breakdown variables of minimum wage levels in the WageIndicator Minimum wages Database

Minimum wage-fixing coverage.	
WageIndicator_coverage: WageIndicator Minimum wages database 2015. YEARS COVERED: 2015	
Yes/No	Industry or enterprise
Yes/No	Firm size
Yes/No	Occupational group/job type
Yes/No	Skill level
Yes/No	Educational level
Yes/No	Grade
Yes/No	Geographical characteristics
Yes/No	Age
Yes/No	Years of service

2.6 World Bank Labour Market Regulation Database

As part of its Doing Business reporting, the World Bank maintains a Labour Market Regulation Database covering the years 2006 to 2014.¹⁹ By early 2017, we could download an update covering the years 2014 and 2015.²⁰ This database indicates minimum wage rates, measured per June 1st, and assigns a zero value to countries without a rate. We assumed that the countries with a minimum wage rate do have a minimum wage policy, whereas the countries without a rate don't have such a policy. In 2011 and 2012 six and four countries respectively have no values, and for these countries/years we assigned value -8. Information for countries with and without a minimum wage policy is available for 183 countries in 2011, for 185 in 2012, and for 189 in 2013, 2014 and 2015. We abbreviate this database as the WorldBank_db.

Table 7 One variable in the World Bank Labour Market Regulation Database

Minimum wage-fixing mechanisms.	
WorldBank_db: World Bank Database. YEARS COVERED: 2011, 2012, 2013	
0	No minimum wage policy
1	MW policy
-8	Insufficient data

19 See <http://www.doingbusiness.org/data/exploretopics/labor-market-regulation> , accessed 30SEP2016.

20 See <http://www.doingbusiness.org/data/exploretopics/labor-market-regulation> , accessed 5JAN2017.

3 The merged datasets

For the comparison of the databases, we merged the minimum wage-fixing mechanisms databases and the minimum wage-fixing coverage databases, resulting in one dataset with 65 variables for the years 2011 to 2015. See Table 8 for the years covered. Appendix 7.1 has an extensive list of countries.

Table 8 Databases, variables and years covered in the merged datasets

Minimum wage-fixing mechanisms						
Database	Variable	2011	2012	2013	2014	2015
EURWORK	Existence of statutory Minimum wages (NMW)	✓	✓	✓	✓	✓
	Determination of Minimum wages (MWDet)	✓	✓	✓	✓	✓
	Implementation of Minimum wages (MWSet)	✓	✓	✓	✓	✓
ICTWSS	National Minimum wage setting (nms)	✓	✓	✓	✓	
ILO_ratification	ILO member and Ratification C026	✓	✓	✓	✓	✓
	ILO member and Ratification C131	✓	✓	✓	✓	✓
ILO_MWmechanisms	Minimum wage-fixing mechanism and levels		✓			
ILO_GWD	Existence of a minimum wage	✓	✓	✓	✓	✓
ILO_survey	MWbyLaw				✓	
	MWbyLawafterCons				✓	
	MWonTripartiteBasis				✓	
	MWbyCollBarg				✓	
MACHEquity	Minimum wage-fixing mechanism	✓	✓	✓		
WageIndicator_MWmech	Existence of a minimum wage		✓			
WageIndicator_Law	Minimum wage-fixing mechanism					✓
WorldBank_db	Minimum wage-fixing mechanism	✓	✓	✓	✓	✓
Minimum wage-fixing coverage						
Database	Variable	2011	2012	2013	2014	2015
EURWORK	Universal wage floor (Floor)	✓	✓	✓	✓	✓
ICTWSS	National Minimum wage (nmw)	✓	✓	✓	✓	
ILO_MWcoverage	Minimum wage-fixing coverage		✓			
WageIndicator_coverage	Minimum wage-fixing coverage					✓

Source: Merged EURWORK/ICTWSS/ILO/MACHE/WageIndicator/WorldBank databases

The twelve databases were merged into one database with 195 countries. Not all databases provided data for all years and all countries, but each year was covered by at least 6 databases (Table 9).

Table 9 Number of countries in each database, by year

	Database	2011	2012	2013	2014	2015
1	EURWORK	29	29	29	29	29
2	ICTWSS	47	47	46	34	--
3	ILO_ratification	183	185	185	185	186
4	ILO_GWD	106	100	97	30	22
5	ILO_MWmechanisms	--	153	--	--	--
6	ILO_MWcoverage	--	152	--	--	--
7	ILO_survey	--	--	--	102	--
8	MACHEquity	107	107	107	--	--
9	WageIndicator_Mwmechanisms	--	65	--	--	--
10	WageIndicator_Law	--	--	--	--	120
11	WageIndicator_coverage	--	--	--	--	76
12	WorldBank	183	185	189	189	189
	Total countries	195	195	195	195	195
	Total databases	6	9	6	6	6

Source: Merged EURWORK/ICTWSS/ILO/MACHE/WageIndicator/WorldBank databases

Table 10 shows the distribution of the countries in the dataset over the continents. All continents are well represented in the merged dataset, but European countries, particularly from the EU28, are more often present. Note that eight countries are only once in the merged database. These are Cook Islands, Hong Kong, Kosovo, Micronesia, North Korea, Puerto Rico, Tonga, and Tuvalu. Cook Islands and Tuvalu are ILO members, but not present in any other database. Hong Kong, Kosovo, Micronesia, Puerto Rico, Tonga are present in the WorldBank database, but not in any other. North Korea is present in the MACHEquity database, but not in any other.

Table 10 Number of countries included in any of the twelve databases, by continent and by times included.

	1 times	2 times	3 times	4 times	5 times	6 times	7 times	8+ times	Total
Africa	0	1	3	2	6	8	9	25	54
Asia	2	2	2	6	7	9	7	14	49
Europe	1	0	1	3	0	2	6	29	42
North America	0	1	1	4	3	5	0	9	23
Oceania	4	2	1	2	3	0	0	2	14
South America	1	0	1	1	0	0	2	8	13
Total	8	6	9	18	19	24	24	87	195

Source: Merged EURWORK/ICTWSS/ILO/MACHE/WageIndicator/WorldBank databases

The merged dataset is used to compare the classifications concerning the minimum wage-fixing mechanisms. Several dimensions of the minimum wage-fixing mechanisms are in existence. As ILO (2014) shows in its overview, countries vary widely with respect to their machinery. The challenge here is to classify the countries such that they become comparable across databases, as will be done in the next Section.

A first exploration of the merged dataset concerns changes in minimum wage policies in the years 2011-2015, to be concluded from the databases covering multiple years. In EURWORK between 2011 and 2015 two countries changed from 'minimum wage-fixing through collective bargaining' to 'minimum wage setting by law', notably Germany and Greece, both in 2015. In ICTWSS between 2011 and 2014 no country changed coding. In WorldBank_db four of the 183 countries changed coding from 'no minimum wage' to 'minimum wage' between 2011 and 2013, notably Guyana, Kosovo, Malaysia, and Palestinian Territories. The MACHEquity database covers almost 15 years (1999-2013) and notices 11 of 117 countries with policy changes in these years, hence on average less than one country per year faces policy changes. This database does not provide information regarding the years associated with these changes. Overall this exploration generates trust in the databases. Changes reflect real changes and no coding mistakes, ensuring that over time countries are pretty stable with respect to their minimum wage policies.

4 Minimum wage-fixing mechanisms, countries compared

4.1 Introduction

In this section we aim to explore the merged database and analyse to what extent countries are classified similarly across the twelve databases concerning their minimum wage-fixing mechanisms. The twelve databases vary with respect to their definitions, as was already shown in Section 2. We developed a mapping table to classify the countries' policies into a binary variable whether they do or don't have a legal minimum wage-fixing mechanism (See Appendix 7.3). Note first that not all databases precisely report whether a country has a legal minimum wage. This specifically applies to the two databases that report minimum wage rates, notably the Global Wage Database of ILO (ILO_GWD) and the Minimum wage database from World Bank (WorldBank_db). These databases report wage rates, and we have concluded that countries with a rate do have a minimum wage mechanism and countries without don't have so, as explained in Section 2. For some countries this may however be a naïve conclusion. Note further that three databases only report countries with a minimum wage-fixing mechanism, not the countries without one. These are ILO's Global Wage Database (ILO_GWD) and General Survey for its International Labour Conference (ILO_survey 2014) and WageIndicator Minimum wages database (WageIndicator_coverage 2015). Note finally that the ILO_ratification database reports whether a country has ratified the two relevant ILO conventions but ratification is not identical to applying a wage-fixing mechanism. In Section 4.5 we will test the merged database against the ratifications.

4.2 Minimum wage-fixing mechanisms

In the exploration of the databases we first provide an overview of the share of countries with a legal minimum wage-fixing mechanism. Here we consider countries where minimum wages are set by collective bargaining as countries with no legal setting. Between 75% and 93% of the countries do apply a minimum wage-fixing mechanism (Table 11). The percentages vary across databases, due to the different number of countries covered and due to slight variations in the definitions across databases.

Table 11 Percentage of countries with a legal minimum wage-fixing mechanism and number of countries covered, by dataset and year.

Dataset	2011	2012	2013	2014	2015	#cntrs
EURWORK	75.9%	75.9%	75.9%	75.9%	79.3%	29
ICTWSS	80.9%	80.9%	80.4%	76.5%	--	47
ILO_ratification	--	--	--	--	--	186
ILO_GWD	--	--	--	--	--	106
ILO_MWmechanisms	--	75.2%	--	--	--	153
ILO_MWcoverage	--	93.4%	--	--	--	152
ILO_survey	--	--	--	71.6%	--	102
MACHEquity	88.8%	88.8%	88.8%	--	--	107
WageIndicator_Mwmech	--	84.6%	--	--	--	65
WageIndicator_Law	--	--	--	--	85.0%	120
WageIndicator_coverage	--	--	--	--	--	76
WorldBank_db	79.2%	79.5%	81.0%	84.1%	85.2%	189

Source: Merged EURWORK/ICTWSS/ILO/MACHE/WageIndicator/WorldBank databases

4.3 Minimum wage set by collective bargaining

Six databases provide information whether minimum wages are fixed by collective bargaining: EURWORK, ICTWSS, ILO_MWmechanisms, ILO_survey, MACHEquity and WageIndicator_Law. Five of these databases measure minimum wage-fixing by collective bargaining mutually exclusive with other forms, whereas a sixth database, ILO_survey, does not do so exclusively. ILO_survey consists of four variables, measuring several forms of minimum wage-fixing mechanisms, one them through collective bargaining. If this variable had a positive score, and none of the other three had so, the country was considered to rely fully on minimum wage-fixing by collective bargaining.

Note that minimum wage-fixing by collective bargaining is not really providing much information, because almost all countries in the world have collective bargaining, whether this is for one company or for almost all industries. And in these bargaining agreements wages will be set, although there are also agreements that bargaining about other issues than wages. In their analyses of 249 agreements from 11 developing countries, Besamusca and Tijdens (2015) find that while wages are an integral part of almost all collective agreements, the detail with which they are set was much lower than expected. The agreements recognised the role of bargaining in wage setting, but did not commonly include pay scales and leave the determination of exact wages up to individual contracts. When disregarding these considerations, we can compute the percentage of countries that rely solely on minimum wage-fixing by collective bargaining (Table 12).

Table 12 shows that the EURWORK databases have high scores here. In all years among EU28 plus Norway more than one in four countries have their minimum wages set by collective bargaining. Only one in five countries do so according to ICTWSS for European and OECD countries. For the other databases the percentages are much lower. It is only 7% according to ILO in 2012 for 152 countries, 13% according to ILO in 2014, 8% according to the WageIndicator LabourLaw database in 2015 for 120 countries, and 3% according to the MACHEquity database for 110 countries. Table 12 shows that minimum wage setting through collective bargaining is predominantly a European

phenomenon, in other continents it is only known in four African countries.²¹ For Europe a breakdown by country shows that in 2011 it is found in all five Nordic countries and in Austria, Belgium, Estonia, Germany, Greece, Italy, and Switzerland. By 2015, Germany and Greece had implemented a legal minimum wage. Note that the rise in the percentage of countries with bargaining setting in the ICTWSS database is solely due to the fact that the number of countries in the database have dropped.

Table 12 Percentage of countries with minimum wage setting only through collective bargaining, by dataset and year.

Database	2011	2012	2013	2014	2015	#cntrs
EURWORK	34.5%	31.0%	31.0%	27.6%	27.6%	29
ICTWSS	19.1%	19.1%	19.6%	23.5%	x	47
ILO_ratification	x	x	x	x	x	186
ILO_GWD	x	x	x	x	x	106
ILO_MWmechanisms	x	x	x	x	x	153
ILO_MWcoverage	x	7.2%	x	x	x	152
ILO_survey	x	x	x	x	12.7%	102
MACHEquity	2.8%	2.8%	2.8%	x	x	107
WageIndicator_Mwmech.	x	x	x	x	x	65
WageIndicator_Law	x	x	x	x	8.3%	120
WageIndicator_coverage	x	x	x	x	x	76
WorldBank_db	x	x	x	x	x	189

Source: Merged EURWORK/ICTWSS/ILO/MACHE/WageIndicator/WorldBank databases

4.4 Minimum wage-fixing mechanisms and ILO Conventions 26 and 131

Finally, we test how many countries have a legal minimum wage-fixing mechanism, as discussed in Section 4.2, and how many of them have signed the ILO Conventions C026 and C131 about Minimum Wages. The analysis is limited to the countries that are ILO member and apply a legal mechanism (Table 13). The results show that across years and databases, between 55% and 65% of the countries which a minimum wage-fixing mechanism have indeed signed Convention 26, whereas between 30% and 40% have signed Covention 131, with 51% in the ILO_survey for 2014.

21 Central African Republic, Chad, Eritrea, Namibia.

Table 13 ILO members with a statutory minimum wage-fixing mechanism (Column N), and percentages of members who signed conventions C026 and C131, by database and year

Database	2011			2012			2013			2014			2015		
	C26	C131	N	C26	C131	N	C26	C131	N	C26	C131	N	C26	C131	N
EURWORK	54.5	40.9	22	54.5	40.9	22	54.5	40.9	22	54.5	40.9	22	56.5	39.1	23
ICTWSS	65.8	39.5	38	65.8	39.5	38	64.9	40.5	37	65.4	42.3	26			
ILO_ratification															
ILO_GWD	64.1	31.1	103	63.9	32.0	97	62.8	34.0	94	63.3	40.0	30	54.5	31.8	22
ILO_MWmechanisms				65.2	31.3	115									
ILO_MWcoverage				66.2	30.3	142									
ILO_survey										61.6	50.7	73			
MACHEquity	63.8	31.9	94	63.8	31.9	94	63.8	33.0	94						
WageIndicator_Mwm				61.8	43.6	55									
WageIndicator_Law													64.7	34.3	102
WageIndica- tor_coverage															
WorldBank	62.4	32.6	141	62.2	32.9	143	61.5	33.8	148	61.2	32.9	152	61.7	32.5	154

Source: Merged EURWORK/ICTWSS/ILO/MACHE/WageIndicator/WorldBank databases

Of course, it is more interesting to explore the countries that have signed any of the Conventions, but do not have a legal minimum wage-fixing mechanism according to any of the databases. We expect that all signatories indeed apply a fixing mechanism (Tables 14 and 15). However, regarding Convention 26 only according to one database this is indeed the case (ILO_GWD). According to the other databases, between 75% and 99% have done so. The largest problem is shown for the EU28 countries plus Norway (EURWORK). By 2011 four countries had signed this Convention, but did not have a minimum wage policy: Austria, Germany, Italy, Norway. By 2015, Germany was no longer in this list, because the country had adopted a statutory minimum wage-fixing mechanism.

Table 14 ILO members who signed convention C026 (Column N), and percentage of these members who apply a statutory minimum wage-fixing mechanism, by database and year

Database	2011		2012		2013		2014		2015	
	C26	N	C26	N	C26	N	C26	N	C26	N
EURWORK	75.0	16	75.0	16	75.0	16	75.0	16	81.3	16
ICTWSS	83.3	30	83.3	30	82.8	29	77.3	22		
ILO_ratification										
ILO_GWD	100	66	100	62	100	59	100	19	100	12
ILO_MWmechanisms			78.1	96						
ILO_MWcoverage			98.9	95						
ILO_survey							72.6	62		
MACHEquity	96.8	62	96.8	62	96.8	62				
WageIndicator_Mwm			87.2	39						
WageIndicator_Law									90.4	73
WageIndicator_coverage										
WorldBank	89.8	98	89.0	100	89.2	102	91.2	102	92.2	103

Source: Merged EURWORK/ICTWSS/ILO/MACHE/WageIndicator/WorldBank databases

Regarding Convention 131 all EU28 signatories plus Norway apply indeed a minimum wage-fixing mechanism. The percentages of signatories who indeed apply a mechanism are in all other databases above 90%, apart from the 82% in 2012 in the ILO_MWmechanisms database and the 84% in 2014 in the ILO_survey database.

Table 15 LO members who signed convention C131 (Column N), and percentage of these members who apply a statutory minimum wage-fixing mechanism, by database and year

Database	2011		2012		2013		2014		2015	
	C131	N	C131	N	C131	N	C131	N	C131	N
EURWORK	100	9	100	9	100	9	100	9	100	9
ICTWSS	100	15	100	15	100	15	100	11		
ILO_ratification										
ILO_GWD	100	32	100	31	100	32	100	12	100	7
ILO_MWmechanisms			81.8	44						
ILO_MWcoverage			97.7	44						
ILO_survey							84.1	44		
MACHEquity	90.9	33	90.9	33	91.2	34				
WageIndicator_Mwmechanisms			100	24						
WageIndicator_Law									97.2	36
WageIndicator_coverage										
WorldBank	95.8	48	95.9	49	98.0	51	98.0	51	98.0	51

Source: Merged EURWORK/ICTWSS/ILO/MACHE/WageIndicator/WorldBank databases

4.5 Conclusion

The merged database reveals that countries are not classified similarly across databases. Between 75% and 93% of the countries apply a statutory minimum wage-fixing mechanism across years and databases. Less than one in ten countries relies solely on minimum wage setting by collective bargaining. In the EU28 plus Norway and Iceland this percentage is relatively high, but in countries outside Europe it is far below 10%. Two ILO conventions detail minimum wage-fixing mechanisms. Across years and databases roughly three in five countries that apply a statutory minimum wage-fixing mechanism have signed the oldest Convention (C26), whereas roughly one in three has done so with the most recent Convention (C131). Obviously, many more countries could have signed the Conventions. A few countries in EU28 and Norway have signed the Conventions but do not have a statutory minimum wage-fixing mechanism, but rely solely on collective bargaining for minimum wage setting. Given that they are signatories, they obviously consider minimum wage setting in collective bargaining as a nationwide fixing mechanism.

5 Minimum wage-fixing coverage compared

5.1 Coverage: National versus specific minimum wages

The next step in our comparison of databases is a description of the minimum wage-fixing coverage: if a country applies a statutory minimum wage, is this wage then applied to the entire dependent labour force, or are some groups in- or excluded? Four databases provide information, notably EURWORK, ICTWSS, ILO_MWcoverage, and WageIndicator_coverage. We do not consider EURWORK here, because EURWORK and ICTWSS contain the same information, but EURWORK does so for fewer countries.

Table 16 shows that four in five ICTWSS countries with a statutory minimum wage apply it to the entire dependent labour force, whereas one in five does so for some groups only. The ICTWSS database does not provide information on which groups are in- or excluded.

Table 16 Distribution over national versus specific minimum wages, ICTWSS database

	2011	2012	2013	2014
Statutory national (cross-sectoral or inter-occupational) minimum wage exists	67%	67%	68%	66%
Statutory Minimum wage in some sectors (occupations, regions/states) only	15%	15%	13%	11%
No statutory Minimum wage	19%	19%	19%	23%
#Countries	48	48	47	35

Source: Merged EURWORK/ICTWSS/ILO/MACHE/WageIndicator/WorldBank databases

The ILO_MWcoverage database 2012 reveals that almost half of the 142 countries with statutory minimum wages apply a system of multiple or differentiated minimum wages (Table 17). It shows that differentiation by sector and industry is most common, whereas regional differentiation applies to less than ten countries. Countries with multiple minimum wages are most frequently found in North America and least frequently in Europe (Table 18).

Table 17 Distribution over national versus differentiated minimum wages, ILO_MWcoverage database 2012

ILO_MWcoverage database 2012	Incl. countries without MW		Excl. countries without MW	
	Frequency	Percent	Frequency	Percent
No minimum wage	10	7%	-	-
National	66	43%	66	46%
National by sector and/or occupation	67	44%	67	47%
Regional	4	3%	4	3%
Regional by sector and/or occupation	5	3%	5	4%
Total	152	100%	142	100%

Source: Merged EURWORK/ICTWSS/ILO/MACHE/WageIndicator/WorldBank databases

Table 18 Percentage of 142 countries with differentiated minimum wages, ILO_MWcoverage database 2012

Continent	Africa	Asia	Europe	North America	Oceania	South America	Total
Perc.	66%	46%	38%	76%	33%	36%	54%

Source: Merged EURWORK/ICTWSS/ILO/MACHE/WageIndicator/WorldBank databases

5.2 Breakdowns of multiple statutory Minimum wages

As explained in Section 2.6, the WageIndicator Minimum Wage Database specifies in great detail if and how countries differentiate their minimum wages. The WageIndicator_coverage database specifies nine breakdown characteristics, notably industry, firm size, occupational group, skill level, educational level, grade, geographical characteristics, age, and years of service. The database holds information for 76 countries, of which 36 have a single minimum wage rate and the remaining 40 apply multiple rates (Table 19). Of these 40 countries, 25 apply a breakdown by one characteristic, 11 do so by two characteristics and 4 countries apply more than two: Madagascar by 3, Ethiopia by 4, Kenya by 5 and South Africa does so by even 7 characteristics.

One should note the differences between the findings of ICTWSS in section 5.1 and findings of WageIndicator in this section. The differences are due to the definitions used. Whereas ICTWSS identifies whether the minimum wage covers a partial labour force which not necessary implies multiple minimum wages, WageIndicator database specifies multiple minimum wages for either the whole or a partial labour force. For example, the minimum wage rates in the Netherlands are broken down by age groups for youth minimum wages, but they do cover the whole labour force. In the ICTWSS database a country is not identified as a country with “Statutory minimum wage in some sectors (occupations, regions/states) only”, while in WageIndicator this country is identified as a country with multiple minimum wages.

Table 19 Number of countries in WageIndicator_coverage database with one or multiple minimum wages

Continent	#cntrs	One MW	Multiple MWs		
			1 Characteristic	2 Characteristics	3+ Characteristics
Africa	22	9	7	2	4
Asia	12	6	4	2	0
Europe	27	15	8	4	0
North America	7	0	4	3	0
South America	6	4	2	0	0
Oceania	2	2	0	0	0
Total #Countries	76	36	25	11	4

Source: WageIndicator Minimum wages Database, dump 2016 June

The breakdown yardstick most frequently recorded is that by industry, as this is applied by 18 of the 40 countries with multiple rates, and of these 18 countries 7 break down the rates by a second or even a third characteristic (Table 20). The second and third most frequently recorded

breakdown is by occupation (11 countries) and by geographical areas (11 countries). The fourth and fifth breakdowns are by skill and by age (both in 7 countries). Occupation is the characteristic most frequently combined with another characteristic (9 of 11 times). Combinations predominantly are with grade, industry and skill level.

Eighteen countries have a minimum wage breakdown by industry. The most common breakdown is a division between the agricultural and the non-agricultural sectors. Other countries apply different minimum wages for domestic services, for the public sector, for fishing, for wholesale and retail, for gas, electricity and water, or for financial services. In some cases very specific industries are addressed, such as ready-made garment (clothing industry), in other cases additional phrases such as small companies are used.

Table 20 Number of characteristics applied in 40 countries with multiple minimum wages

Characteristic	Characteristic applied	Of which apply at least one other characteristic
Age	7	3
Education	1	1
Firmsize	2	2
Geo	11	3
Grade	5	5
Industry	18	7
Occupation	11	9
Skill	7	7
Tenure	4	4

Source: *WageIndicator Minimum wages Database, dump 2016 June*

Eleven countries break down their minimum wages by occupation or job type. The breakdowns specify a very wide range of groups, such as drivers, foremen, gardeners, general workers, housekeepers, lashers, merchandisers, operators, order pickers, artisans, clerks, and many more.

Eleven countries apply a geographical breakdown. In most cases countries specify different minimum wages for the capital city area and the rest of the country, or they specify rural versus urban areas, such as in Malawi. Portugal differentiates between Madeira and the Azores versus Portugal mainland, where lower minimum wages apply.

Seven countries have a minimum wage breakdown by age or age group. Five countries have a breakdown by grades, of which all are African countries (Ethiopia, Kenya, Madagascar, South Africa, Togo). One country (Costa Rica) has a minimum wage breakdown by education.

Five countries apply a general minimum wage with supplementary minimum wages, applying breakdowns by either occupation or industry. These countries are not included in the overview above, because they do not apply multiple minimum wages, but one general minimum wage with supplements. These countries are Argentina, Bangladesh, Estonia, Hungary and Poland. Argentina has supplementary minimum wages for domestic workers, home maids and staff-for-general-tasks. Bangladesh has supplementary minimum wages for both skilled and unskilled workers in

the cotton and jute textile industry, and for skilled and unskilled engineering work. Estonia has, next to a national minimum wage, specific minimum wages for middle and high school teachers. Hungary has a specific minimum wage for professional workers. Poland has a specific minimum wage for employees with one year of employment.

The results of the analysis in this section reveal that the 40 countries with multiple minimum wage rates mimic collective bargaining, particularly when they break down the rates by industry or occupation. The same applies to the five countries with a general minimum wage, but with supplementary minimum wages for specified groups of workers. Countries with a breakdown by geographical areas either adjust for cost-of-living differences within the country or they follow a wage policy in attracting foreign investments for economic zones.

5.3 Conclusion

If countries apply a statutory wage-fixing mechanism, does the minimum wage then apply to the entire dependent labour force? According to the ICTWSS database, which covers mainly OECD countries, four in five countries do so, while one in five countries does not. Globally, the share of countries with multiple minimum wages is more than half, according to the ILO database for 2012 and the WageIndicator Minimum Wages database for 2015. Most frequently reported breakdowns are by industry or occupation. Countries with multiple minimum wage rates mimic collective bargaining, particularly when they break down the rates by industry or occupation.

6 Minimum Wage Policies database 2011-2015

6.1 Introduction

The second aim of this paper is to generate a Minimum Wage Policies Database (MWPDB) from the merged dataset for as many countries as possible indicating the presence or absence of a statutory minimum wage for the years 2011-2015 (Table 9 showed already for each year which sources are available). We applied the following rules for assigning values to MWPDB for each year under study:

- signatories of Convention 131 are considered countries with a minimum wage, but non-signatories are not considered countries without a minimum wage, but as countries for which data is missing (we assigned value NA); we did not take ratification of C26 into account, because it is an old Convention
- if a country was present in at least three databases but had inconsistent codes across databases, the country was assigned the majority code in MWPDB
- if a country was present in at least two databases and had consistent codes across databases, the country was assigned this code in MWPDB
- if a country was present in two databases and had inconsistent codes across databases, it was assigned NA
- if a country was present in only one database, it was assigned NA; this rule was not applied for the year 2015 due to many more missing observations in that year; if in 2015 a country had a valid code in only one database, but had consistent codes in all years between 2011 and 2014, we assigned that code, otherwise we assigned NA
- if no data was available in any database, we assigned NA.

The MWPDB has observations for 195 countries for five years. Table 21 shows that for half of the countries we know for all five years whether they apply a minimum wage policy (for 97 countries out of 195). In contrast, following the coding rules mentioned above for 16 countries no data are available for any year.²²

Table 21 Number of countries with valid observations across years in MWPDB

Times in MWPDB	Frequency	Percent
Data available for 0 years	16	8.2
Data available for 1 year	18	9.2
Data available for 2 years	8	4.1
Data available for 3 years	24	12.3
Data available for 4 years	32	16.4
Data available for 5 years	97	49.7
Total	195	100

Source: *Minimum Wage Policies Database (MWPDB)*

²² These are in the MWPDB because they are a member of ILO. It concerns Cook Islands, Djibouti, Hong Kong, Kiribati, North Korea, Kosovo, Marshall Islands, Micronesia, Palau, Puerto Rico, San Marino, St. Lucia, St. Vincent and the Grenadines, Tonga, Turkmenistan, and Tuvalu.

A closer look at the countries with missing observations in MWPDB reveals that these are particularly found among the 14 countries in Oceania (Table 24). In contrast, among European and South American countries relative few missing observations are noticed.

Table 24 Percentage of missing observations

Continent	2011	2012	2013	2014	2015	mean	N
Africa	16.7%	3.7%	16.7%	64.8%	27.8%	25.9%	54
Asia	30.6%	12.2%	26.5%	57.1%	34.7%	32.2%	49
Europe	7.1%	4.8%	7.1%	7.1%	7.1%	6.7%	42
North America	30.4%	8.7%	30.4%	47.8%	47.8%	33.0%	23
Oceania	57.1%	50.0%	64.3%	78.6%	78.6%	65.7%	14
South America	15.4%	7.7%	7.7%	23.1%	15.4%	13.8%	13
Total	22.6%	10.3%	21.5%	46.7%	30.3%	26.3%	195

Source: Minimum Wage Policies Database (MWPDB)

6.2 Results

When limiting the MWPDB to the 97 countries with valid observations for all five years, Table 22 shows that more than nine in ten countries have a statutory wage-fixing mechanism, and that this share is increasing. By 2015, 94% of the countries had a minimum wage policy.

Table 22 Percentage of countries with a minimum wage policy, across years, selection: 97 countries with valid observations for all five years

	2011	2012	2013	2014	2015
Mean	91.8%	90.7%	91.8%	91.8%	93.8%
N	97	97	97	97	97

Source: Minimum Wage Policies Database (MWPDB)

The condition of valid observations for all five years provides however a slight selective view on the incidence of countries' minimum wage policies. If this condition is released, the percentage of countries with a statutory wage-fixing mechanism drops a few percentage points (Table 23). See Appendix 7.5 for the list of all countries and their values concerning a minimum wage policy per year.

Table 23 Percentage of countries with a minimum wage policy, across years, selection: countries with valid observations for at least one year

	2011		2012		2013		2014		2015	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
No MW	16	10.6	24	13.7	16	10.5	9	8.7	10	7.4
MW	135	89.4	151	86.3	137	89.5	95	91.3	126	92.6
Total	151	100	175	100	153	100	104	100	136	100
Missing obs	44		20		42		91		59	
Total	195		195		195		195		195	

Source: Minimum Wage Policies Database (MWPDB)

6.3 Conclusion

The second aim of this paper is to generate a Minimum Wage Policies Database (MWPDB) from the merged dataset for as many countries as possible indicating the presence or absence of a statutory minimum wage for the years 2011-2015. Half of the 195 countries have valid data for all five years. Particularly for Europe and South America, MWPDB has satisfactory number of observations, whereas the opposite holds for the small islands in Oceania.

The results show that approximately nine in ten countries do apply a minimum wage policy, and that this share is slightly increasing between 2011 to 2015.

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Appendix

Overview of countries present in the merged database

	EUR WORK	ICT WSS	ILO member	ILO 12 mech	ILO 12 cov	ILO 14 mwlaw	ILO GWD	MACH Equity	WIF 12 mech	WIF LL	WIF 15 cov	WB	#in DB
Afghanistan	0	0	1	1	1	0	1	1	0	1	0	1	7
Albania	0	0	1	1	0	1	1	1	0	0	0	1	6
Algeria	0	0	1	1	1	0	1	1	0	1	0	1	7
Angola	0	0	1	1	1	0	0	1	1	1	1	1	8
Antigua and Barbuda	0	0	1	1	1	1	0	0	0	0	0	1	5
Azerbaijan	0	0	1	0	0	1	1	1	1	0	1	1	7
Argentina	0	1	1	1	1	1	1	1	1	1	1	1	11
Australia	0	1	1	1	1	1	1	0	1	1	1	1	10
Austria	1	1	1	1	1	1	0	0	1	1	1	1	10
Bahamas	0	0	1	1	1	0	0	0	0	0	0	1	4
Bahrain	0	0	1	1	1	0	1	0	0	1	0	1	6
Bangladesh	0	0	1	1	1	1	1	0	0	1	1	1	8
Armenia	0	0	1	0	1	1	1	1	1	0	0	1	7
Barbados	0	0	1	1	1	1	0	1	0	0	0	1	6
Belgium	1	1	1	1	1	1	1	0	1	1	1	1	11
Bhutan	0	0	0	0	0	0	1	1	0	0	0	1	3
Bolivia	0	0	1	1	1	1	1	1	0	1	0	1	8
Bosnia and Herzegovina	0	0	1	0	0	1	0	1	0	0	0	1	4
Botswana	0	0	1	1	1	0	1	1	1	1	1	1	9
Brazil	0	1	1	1	1	1	1	1	1	1	1	1	11
Belize	0	0	1	1	1	0	1	1	0	0	0	1	6
Solomon Islands	0	0	1	1	1	0	0	0	0	0	0	1	4
Brunei	0	0	1	1	1	0	0	0	0	0	0	1	4
Bulgaria	1	1	1	1	1	1	1	0	1	1	1	1	11
Myanmar	0	0	1	1	1	0	0	1	0	0	1	1	6
Burundi	0	0	1	1	1	0	1	0	0	1	1	1	7
Belarus	0	0	1	0	0	0	1	1	1	0	1	1	6
Cambodia	0	0	1	1	1	0	1	1	1	1	1	1	9
Cameroon	0	0	1	1	1	1	1	1	0	1	1	1	9
Canada	0	1	1	1	1	1	1	0	0	1	1	1	9
Cape Verde	0	0	1	1	1	0	0	1	0	1	0	1	6
Central Afri- can Republic	0	0	1	1	1	1	0	1	0	1	0	1	7
Sri Lanka	0	0	1	1	1	1	0	1	1	1	0	1	8
Chad	0	0	1	1	1	1	1	1	0	1	0	1	8

	EUR WORK	ICT WSS	ILO member	ILO 12 mech	ILO 12 cov	ILO 14 mwlaw	ILO GWD	MACH Equity	WIF 12 mech	WIF LL	WIF 15 cov	WB	#in DB
Chile	0	1	1	1	1	1	1	0	1	1	1	1	10
China	0	1	1	1	1	1	1	0	1	1	0	1	9
Taiwan	0	0	0	0	0	0	1	0	0	0	0	1	2
Colombia	0	0	1	1	1	1	1	1	1	1	1	1	10
Comoros	0	0	1	1	1	0	1	0	0	0	0	1	5
Congo, Rep.	0	0	1	0	0	0	0	1	0	0	0	1	3
Congo, Dem. Rep.	0	0	1	1	1	0	1	0	0	1	0	1	6
Cook Islands	0	0	1	0	0	0	0	0	0	0	0	0	1
Costa Rica	0	0	1	1	1	1	1	1	1	1	1	1	10
Croatia	1	1	1	1	1	1	1	0	0	1	1	1	10
Cuba	0	0	1	1	1	0	1	1	0	0	0	0	5
Cyprus	1	1	1	1	1	1	1	0	0	1	1	1	10
Czech Rep.	1	1	1	1	1	1	1	0	1	1	1	1	11
Benin	0	0	1	1	1	1	1	1	0	1	1	1	9
Denmark	1	1	1	1	1	1	0	0	1	1	0	1	9
Dominica	0	0	1	1	1	0	0	0	0	0	0	1	4
Dominican Republic	0	0	1	1	1	0	1	1	0	0	0	1	6
Ecuador	0	0	1	1	1	1	1	1	0	0	0	1	7
El Salvador	0	0	1	1	1	1	1	1	1	1	1	1	10
Equatorial Guinea	0	0	1	1	1	0	1	1	0	0	0	1	6
Ethiopia	0	0	1	1	1	0	1	0	0	1	1	1	7
Eritrea	0	0	1	1	1	0	0	1	0	0	0	1	5
Estonia	1	1	1	1	1	0	1	0	0	1	1	1	9
Fiji	0	0	1	1	1	0	1	0	0	0	0	1	5
Finland	1	1	1	1	1	1	0	0	1	1	0	1	9
France	1	1	1	1	1	1	1	0	1	1	1	1	11
Djibouti	0	0	1	0	0	0	0	0	0	0	0	1	2
Gabon	0	0	1	1	1	1	1	1	0	1	0	1	8
Georgia	0	0	1	0	0	1	0	0	1	0	0	1	4
Gambia	0	0	1	0	0	1	1	1	0	1	0	1	6
Palestinian Territories	0	0	0	0	0	0	1	0	0	0	0	1	2
Germany	1	1	1	1	1	1	0	0	1	1	1	1	10
Ghana	0	0	1	1	1	0	0	1	1	1	1	1	8
Kiribati	0	0	1	1	0	0	0	0	0	0	0	1	3
Greece	1	1	1	0	1	0	0	0	0	1	1	1	7
Grenada	0	0	1	1	1	0	0	0	0	0	0	1	4
Guatemala	0	0	1	1	1	1	0	1	1	1	1	1	9
Guinea	0	0	1	1	1	0	0	0	0	1	1	1	6
Guyana	0	0	1	1	1	0	0	0	0	0	0	1	4

Institutional arrangements regarding Minimum Wage Setting in 195 countries

	EUR WORK	ICT WSS	ILO member	ILO 12 mech	ILO 12 cov	ILO 14 mwlaw	ILO GWD	MACH Equity	WIF 12 mech	WIF LL	WIF 15 cov	WB	#in DB
Haiti	0	0	1	1	1	0	0	1	0	0	0	1	5
Honduras	0	0	1	1	1	1	0	1	1	1	1	1	9
Hong Kong	0	0	0	0	0	0	0	0	0	0	0	1	1
Hungary	1	1	1	1	1	1	0	0	1	1	1	1	10
Iceland	0	1	1	1	1	1	0	0	0	1	0	1	7
India	0	1	1	1	0	1	0	1	1	1	1	1	9
Indonesia	0	1	1	1	1	1	0	1	1	1	1	1	10
Iran	0	0	1	1	1	0	0	0	0	1	0	1	5
Iraq	0	0	1	1	1	1	0	1	0	1	0	1	7
Ireland	1	1	1	1	1	1	0	0	1	1	1	1	10
Israel	0	1	1	0	0	0	0	0	0	1	0	1	4
Italy	1	1	1	1	1	1	0	0	1	1	0	1	9
Cote d'Ivoire	0	0	1	1	1	0	1	1	0	0	0	1	6
Jamaica	0	0	1	1	1	1	0	1	0	0	0	1	6
Japan	0	1	1	1	1	1	0	0	0	1	1	1	8
Kazakhstan	0	0	1	0	0	0	0	1	1	0	1	1	5
Jordan	0	0	1	1	1	1	0	1	0	1	0	1	7
Kenya	0	0	1	1	1	1	0	1	1	1	1	1	9
Korea, North	0	0	0	0	0	0	0	1	0	0	0	0	1
Korea, South	0	1	1	1	1	1	0	0	1	0	0	1	7
Kuwait	0	0	1	1	1	0	0	0	0	1	0	1	5
Kyrgyzstan	0	0	1	0	0	1	0	1	1	0	0	1	5
Laos	0	0	1	1	1	0	0	1	0	0	0	1	5
Lebanon	0	0	1	1	1	0	0	1	0	1	0	1	6
Lesotho	0	0	1	1	1	0	0	1	0	1	0	1	6
Latvia	1	1	1	0	0	1	0	0	0	1	1	1	7
Liberia	0	0	1	0	0	0	0	1	0	0	0	1	3
Libya	0	0	1	1	1	0	0	0	0	1	0	1	5
Lithuania	1	1	1	1	1	1	0	0	0	1	1	1	9
Luxembourg	1	1	1	1	1	1	1	0	1	1	1	1	11
Madagascar	0	0	1	1	1	1	1	1	0	1	1	1	9
Malawi	0	0	1	1	1	0	1	1	1	0	1	1	8
Malaysia	0	0	1	1	1	1	1	0	0	1	1	1	8
Maldives	0	0	1	0	0	1	0	1	0	0	0	1	4
Mali	0	0	1	1	1	1	1	1	0	1	0	1	8
Malta	1	1	1	1	1	1	1	0	0	1	1	1	10
Mauritania	0	0	1	1	1	1	1	1	0	1	0	1	8
Mauritius	0	0	1	1	1	1	1	0	0	0	0	1	6
Mexico	0	1	1	1	1	1	1	1	1	1	1	1	11
Mongolia	0	0	1	1	1	0	1	1	0	1	0	1	7
Moldova	0	0	1	1	1	1	1	1	0	0	0	1	7
Montenegro	0	0	1	0	0	1	0	1	0	0	0	1	4
Morocco	0	0	1	1	1	0	1	1	0	1	0	1	7

	EUR WORK	ICT WSS	ILO member	ILO 12 mech	ILO 12 cov	ILO 14 mwlaw	ILO GWD	MACH Equity	WIF 12 mech	WIF LL	WIF 15 cov	WB	#in DB
Mozambique	0	0	1	1	1	0	1	1	1	1	1	1	9
Oman	0	0	1	0	0	0	1	1	0	1	0	1	5
Namibia	0	0	1	1	1	1	0	1	1	1	0	1	8
Nepal	0	0	1	1	1	1	1	1	0	1	0	1	8
Netherlands	1	1	1	1	1	1	1	0	1	1	1	1	11
Vanuatu	0	0	1	1	1	0	0	1	0	0	0	1	5
New Zealand	0	1	1	1	1	1	1	0	0	1	1	1	9
Nicaragua	0	0	1	1	1	1	1	1	1	1	1	1	10
Niger	0	0	1	1	1	1	1	1	0	1	1	1	9
Nigeria	0	0	1	1	1	0	1	1	0	1	1	1	8
Norway	1	1	1	1	1	1	0	0	0	1	0	1	8
Micronesia	0	0	0	0	0	0	0	0	0	0	0	1	1
Marshall Islands	0	0	1	0	0	0	0	0	0	0	0	1	2
Palau	0	0	1	0	0	0	0	0	0	0	0	1	2
Pakistan	0	0	1	1	1	0	1	1	1	1	1	1	9
Panama	0	0	1	1	1	1	1	1	0	1	0	1	8
Papua New Guinea	0	0	1	1	1	0	1	0	0	0	0	1	5
Paraguay	0	0	1	1	1	0	1	1	1	1	1	1	9
Peru	0	0	1	1	1	1	1	1	0	1	1	1	9
Philippines	0	1	1	1	1	1	1	1	0	1	0	1	9
Poland	1	1	1	0	0	1	1	0	1	1	1	1	9
Portugal	1	1	1	1	1	1	1	0	1	1	1	1	11
Guinea-Bissau	0	0	1	1	1	0	0	1	0	0	0	1	5
Timor-Leste	0	0	1	0	0	1	1	0	0	0	0	1	4
Puerto Rico	0	0	0	0	0	0	0	0	0	0	0	1	1
Qatar	0	0	1	1	1	0	0	1	0	1	0	1	6
Romania	1	1	1	1	1	1	1	0	1	1	1	1	11
Russian Fed.	0	0	1	1	1	1	1	0	1	0	1	1	8
Rwanda	0	0	1	1	1	0	1	1	0	1	1	1	8
St. Kitts and Nevis	0	0	1	1	1	0	0	0	0	0	0	1	4
St. Lucia	0	0	1	0	0	0	0	1	0	0	0	1	3
St. Vincent and the Grenadines	0	0	1	0	0	0	0	0	0	0	0	1	2
San Marino	0	0	1	1	1	0	0	0	0	0	0	1	4
Sao Tome and Principe	0	0	1	1	1	0	0	1	0	0	0	1	5
Saudi Arabia	0	0	1	1	1	0	1	0	0	1	0	1	6
Senegal	0	0	1	1	1	1	1	1	0	1	1	1	9
Serbia	0	0	1	1	1	1	1	1	0	0	0	1	7

Institutional arrangements regarding Minimum Wage Setting in 195 countries

	EUR WORK	ICT WSS	ILO member	ILO 12 mech	ILO 12 cov	ILO 14 mwlaw	ILO GWD	MACH Equity	WIF 12 mech	WIF LL	WIF 15 cov	WB	#in DB
Seychelles	0	0	1	1	1	0	0	0	0	0	0	1	4
Sierra Leone	0	0	1	0	0	0	1	1	0	0	0	1	4
Singapore	0	0	1	1	1	0	0	0	0	0	0	1	4
Slovakia	1	1	1	1	1	1	1	0	1	1	1	1	11
Vietnam	0	0	1	1	1	1	1	1	1	1	1	1	10
Slovenia	1	1	1	1	1	1	1	0	1	1	1	1	11
Somalia	0	0	1	1	1	0	0	1	0	1	0	0	5
South Africa	0	1	1	1	1	1	1	1	1	1	1	1	11
Zimbabwe	0	0	1	1	1	0	0	1	1	1	0	1	7
Spain	1	1	1	1	1	1	1	0	1	1	1	1	11
South Sudan	0	0	1	0	0	0	0	0	0	1	0	1	3
Sudan	0	0	1	1	1	0	1	1	0	1	0	1	7
Suriname	0	0	1	0	0	0	0	1	0	0	0	1	3
Swaziland	0	0	1	1	1	1	1	1	0	1	0	1	8
Sweden	1	1	1	1	1	1	0	0	1	1	0	1	9
Switzerland	0	1	1	1	1	1	0	0	0	1	0	1	7
Syria	0	0	1	1	1	0	0	1	0	1	0	1	6
Tajikistan	0	0	1	0	0	0	1	1	1	0	0	1	5
Thailand	0	0	1	1	1	1	1	1	0	1	0	1	8
Togo	0	0	1	1	1	1	1	1	0	1	1	1	9
Tonga	0	0	0	0	0	0	0	0	0	0	0	1	1
Trinidad and Tobago	0	0	1	1	1	0	1	1	0	0	0	1	6
United Arab Emirates	0	0	1	1	1	0	0	1	0	1	0	1	6
Tunisia	0	0	1	1	1	0	1	1	0	1	0	1	7
Turkey	0	1	1	1	1	1	1	1	0	1	1	1	10
Turkmenistan	0	0	1	0	0	0	0	1	1	0	0	0	3
Tuvalu	0	0	1	0	0	0	0	0	0	0	0	0	1
Uganda	0	0	1	1	1	0	1	1	0	1	1	1	8
Ukraine	0	0	1	1	1	1	1	1	1	0	1	1	9
Macedonia	0	0	1	0	0	1	0	0	0	0	0	1	3
Egypt	0	0	1	1	1	0	1	1	1	1	1	1	9
United Kingdom	1	1	1	1	1	1	1	0	1	1	1	1	11
Tanzania	0	0	1	1	1	1	1	1	1	1	1	1	10
United States	0	1	1	1	1	1	1	0	1	1	0	1	9
Burkina Faso	0	0	1	1	1	1	1	1	0	0	0	1	7
Uruguay	0	0	1	1	1	1	1	1	0	1	0	1	8
Uzbekistan	0	0	1	0	0	1	1	1	1	0	0	1	6
Venezuela	0	0	1	1	1	0	1	1	0	1	0	1	7
Samoa	0	0	1	0	0	1	0	1	0	0	0	1	4
Yemen	0	0	1	1	1	0	0	1	0	1	0	1	6

	EUR WORK	ICT WSS	ILO member	ILO 12 mech	ILO 12 cov	ILO 14 mwlaw	ILO GWD	MACH Equity	WIF 12 mech	WIF LL	WIF 15 cov	WB	#in DB
Zambia	0	0	1	1	1	1	1	1	1	1	1	1	10
Kosovo	0	0	0	0	0	0	0	0	0	0	0	1	1

Databases with Minimum wage Rates

- the ILO Global Wage Database, and specifically the statutory nominal gross monthly Minimum wage effective December 31st (Local currency), provides information about Minimum wage levels for all ILO member States for the period from 1995 to 2015 (where available)²³
- the OECD real hourly Minimum wage database in [OECD.Stat](#), provides information about the statutory real hourly and annual Minimum wages for OECD countries and covering the years 2000 to 2015 with annual updates²⁴
- the EUROSTAT database on Earnings, specifically its Monthly Minimum wages - bi-annual data (earn_mw_cur), for EU countries and six non-eu countries covering the years 1999 to 2015 with bi-annual updates²⁵
- the WSI-Mindestlohndatenbank International provides information about the statutory Minimum wage levels for EU countries, for European countries outside EU, and for eight non-European countries, covering the period 2000 – 2016 with annual updates²⁶
- MACHEquity database with minimum wage rates for 121 developing countries for the years 1999 to 2013, most likely not updated²⁷
- WageIndicator Minimum wages Database²⁸
- World Bank Labour Market Regulation Database²⁹

23 See http://www.ilo.org/ilostat/faces/wcnav_defaultSelection?_afLoop=1249002300530291&_afWindowMode=0&_afWindowId=null#!%40%40%3F_afWindowId%3Dnull%26_afLoop%3D1249002300530291%26_afWindowMode%3D0%26_adf.ctrl-state%3D19s68wpgdo_59, accessed 5JAN2017

24 See <https://stats.oecd.org/Index.aspx?DataSetCode=RMW#>, accessed 24AUG2016

25 See <http://ec.europa.eu/eurostat/web/labour-market/earnings/database>, accessed 24AUG2016

26 See http://www.boeckler.de/wsi-tarifarchiv_43610.htm, accessed 24AUG2016

27 See <http://MACHEquity.com/data-center-2/>, accessed 29SEP2016

28 See <http://www.wageindicator.org/main/salary/minimum-wage>, accessed 21SEP2016

29 See <http://www.doingbusiness.org/data/exploretopics/labor-market-regulation>, accessed 30SEP2016.

Coding scheme Minimum Wage Policy

Table 25 Coding scheme classifying databases into one variable: Statutory Minimum Wage

MW	EURWORK	ICTWSS	ILO_MWmechanisms	ILO_MWcoverage	MACHE	WageInd_Law	WorldBank
Yes	1 Government alone	3 National Minimum wage is set by agreement (as in 1 or 2) but extended and made binding by law or Ministerial decree	1 Government alone	1 National	1 minimum wage policy, all years	A Set By Law	1 minimum wage rate
Yes	2 Government jointly with social partners (i.e via tripartite negotiations)	4 National Minimum wage is set through tripartite negotiations	2 Government upon consultation of the social partners	2 Regional			
Yes		5 National Minimum wage is set by government, but after (non-binding) tripartite consultations	3 Government following the recommendation/consultation of a specialized body	3 National by sector and/or occupation			
Yes		6 Minimum wage set by judges or expert committee, as in award-system		4 Regional by sector and/or occupation			
Yes		7 Minimum wage is set by government but government is bound by fixed rule (index-based Minimum wage)					
Yes		8 Minimum wage is set by government, without fixed rule					
No	3 Government following individual or joint proposals of social partners	0 No statutory Minimum wage, no sectoral or national agreements	4 Collective bargaining/social partners	5 No Minimum wage	0 No minimum wage policy	B Set By Collective Bargaining	0 No minimum wage rate
No	4 Recommendations from judges or expert committee, as in award-system	1 Minimum wages are set by (sectoral) collective agreement or tripartite wage boards in (some) sectors	5 Specialized body		2 min. wage set by coll. bargaining	E No Clear Provision	
No	5 Social partners in bilateral negotiations	2 Minimum wages are set by nat. agreement (autonomous agreement) between unions and employers	6 No Minimum wage		3 Policy exists, but min. wage level not set		
-8					4 Indeterminate policy	Z Insufficient Data	

Variables in MACHEquity

The indicator captures the status of minimum wage policy and any changes that occurred in policy over the entire period from 1999 to 2013 (MACHEquity, no year, p 9). See detailed descriptions of indicator categories below.

No minimum wage policy:

- There was no minimum wage law/decree during the entire period from 1999 to 2013.
- Minimum wages are only established for government/public sectors and country is not Cuba, North Korea, Vietnam or a socialist economy where minimum wages are set for the public sector.
- The law aspirationally states that “minimum wages may be determined by decree” and there is no minimum wage level yet set.
- Law/decree states that “the minimum wage cannot be less than the amount fixed by the Government” (or a similar aspirational statement) and there is no reference to how the minimum is to be set and no minimum wage level has been established.

MW policy, all years:

- Minimum wages are established by law/decree, with a known minimum wage level set by State authority or a Wage Board, over the entire period from 1999 to 2013).
- A country has a ‘dual system’, where sectoral minimum wages are established legislatively for some sectors and through collective bargaining in others, even if the legislatively established minimum wages do not apply to all workers.
- The minimum wage is established through national collective bargaining and minimum wage levels are clearly established.

Policy exists, but minimum wage level not set:

- There exists a law/decree stating that workers are entitled or guaranteed to receive a minimum wage, but no specific minimum wage level has yet been set over the entire period from 1999 to 2013.
- A minimum wage exists (minimum wage-fixing process exists) but it is set by commission and the commission has not been created or has not pronounced itself, even if some wages exist for certain sectors through collective agreements.

MW set by collective bargaining:

- Sector-specific collective bargaining represents the only minimum wage setting mechanism within the country during the entire period from 1999 to 2013.

MW policy change:

- A minimum wage law or decree was introduced/repealed during the period between 1999 and 2013 establishing/abolishing a minimum wage and a fixed minimum wage level was set/suspended at some point during the series.
- A minimum wage level for any sector was established at some point during the series for the first time, even if legislation previously established minimum wage protection without a specified level.

Countries in Minimum Wage Policies Database (MWPDB) 2011-2015³⁰

code	country	2011	2012	2013	2014	2015
4	Afghanistan	1	1	1	-9	-9
8	Albania	1	1	1	1	1
12	Algeria	1	1	1	-9	1
24	Angola	1	1	1	-9	1
28	Antigua and Barbuda	1	1	1	1	1
31	Azerbaijan	1	1	1	1	1
32	Argentina	1	1	1	1	1
36	Australia	1	1	1	1	1
40	Austria	0	0	0	0	1
44	Bahamas	-9	1	-9	-9	-9
48	Bahrain	-9	0	-9	-9	0
50	Bangladesh	1	1	1	-9	1
51	Armenia	1	1	1	1	1
52	Barbados	-9	1	-9	1	-9
56	Belgium	1	1	1	1	1
64	Bhutan	1	1	1	-9	-9
68	Bolivia	1	1	1	1	1
70	Bosnia and Herzegovina	1	1	1	1	1
72	Botswana	1	1	1	-9	1
76	Brazil	1	1	1	1	1
84	Belize	1	1	1	-9	-9
90	Solomon Islands	-9	1	-9	-9	-9
96	Brunei	-9	0	-9	-9	-9
100	Bulgaria	1	1	1	1	1
104	Myanmar	-9	1	-9	-9	-9
108	Burundi	1	1	1	-9	1
112	Belarus	1	1	1	1	1
116	Cambodia	1	1	1	-9	1
120	Cameroon	1	1	1	1	1
124	Canada	1	1	1	1	1
132	Cape Verde	0	0	0	-9	-9

³⁰ Values: 1 = Minimum wage policy; 0 = No minimum wage policy; -9 = Insufficient data.

code	country	2011	2012	2013	2014	2015
140	Central African Republic	1	1	1	1	1
144	Sri Lanka	1	1	1	1	1
148	Chad	1	1	1	-9	-9
152	Chile	1	1	1	1	1
156	China	1	1	1	1	1
158	Taiwan	1	1	1	-9	-9
170	Colombia	1	1	1	1	1
174	Comoros	-9	1	-9	-9	-9
178	Congo, Rep.	1	1	1	-9	-9
180	Congo, Dem. Rep.	1	1	-9	-9	1
184	Cook Islands	-9	-9	-9	-9	-9
188	Costa Rica	1	1	1	1	1
191	Croatia	1	1	1	1	1
192	Cuba	1	1	1	-9	-9
196	Cyprus	1	1	1	1	1
203	Czech Republic	1	1	1	1	1
204	Benin	1	1	1	1	1
208	Denmark	0	0	0	0	0
212	Dominica	-9	1	-9	-9	-9
214	Dominican Republic	1	1	1	1	1
218	Ecuador	1	1	1	1	1
222	El Salvador	1	1	1	1	1
226	Equatorial Guinea	1	1	1	-9	-9
231	Ethiopia	-9	0	-9	-9	1
232	Eritrea	0	0	0	-9	-9
233	Estonia	1	1	1	1	1
242	Fiji	1	1	-9	-9	-9
246	Finland	0	0	0	0	0
250	France	1	1	1	1	1
262	Djibouti	-9	-9	-9	-9	-9
266	Gabon	1	1	1	1	1
268	Georgia	-9	1	-9	1	-9
270	Gambia	1	1	1	0	-9
275	Palestinian Territories	-9	-9	1	-9	-9
276	Germany	0	0	0	0	1
288	Ghana	1	1	1	-9	1
296	Kiribati	-9	-9	-9	-9	-9
300	Greece	1	1	1	1	1
308	Grenada	-9	1	-9	-9	-9
320	Guatemala	1	1	1	1	1
324	Guinea	-9	0	-9	-9	1
328	Guyana	-9	1	1	1	1
332	Haiti	1	1	1	-9	-9
340	Honduras	1	1	1	-9	1

Institutional arrangements regarding Minimum Wage Setting in 195 countries

code	country	2011	2012	2013	2014	2015
344	Hong Kong	-9	-9	-9	-9	-9
348	Hungary	1	1	1	1	1
352	Iceland	-9	0	-9	-9	-9
356	India	1	1	1	1	1
360	Indonesia	1	1	1	1	1
364	Iran	-9	1	-9	-9	1
368	Iraq	1	1	1	1	1
372	Ireland	1	1	1	1	1
376	Israel	-9	-9	-9	-9	1
380	Italy	0	0	0	0	0
384	Cote d'Ivoire	1	1	1	-9	-9
388	Jamaica	1	1	1	1	1
392	Japan	1	1	1	1	1
398	Kazakhstan	1	1	1	-9	1
400	Jordan	1	1	1	-9	1
404	Kenya	1	1	1	1	1
408	Korea, Dem.Rep. (North)	-9	-9	-9	-9	-9
410	Korea, Rep.	1	1	1	1	1
414	Kuwait	-9	1	-9	-9	1
417	Kyrgyzstan	1	1	1	1	1
418	Laos	1	1	1	-9	-9
422	Lebanon	1	1	1	1	1
426	Lesotho	1	1	1	-9	1
428	Latvia	1	1	1	1	1
430	Liberia	1	1	1	-9	-9
434	Libya	-9	1	1	1	1
440	Lithuania	1	1	1	1	1
442	Luxembourg	1	1	1	1	1
450	Madagascar	1	1	1	-9	1
454	Malawi	1	1	1	-9	1
458	Malaysia	-9	1	1	1	1
462	Maldives	0	0	0	-9	-9
466	Mali	1	1	1	1	1
470	Malta	1	1	1	1	1
478	Mauritania	1	1	1	1	1
480	Mauritius	1	1	1	1	1
484	Mexico	1	1	1	1	1
496	Mongolia	1	1	1	1	1
498	Moldova	1	1	1	1	1
499	Montenegro	1	1	1	1	1
504	Morocco	1	1	1	1	1
508	Mozambique	1	1	1	-9	1
512	Oman	1	1	1	-9	1
516	Namibia	0	0	0	-9	0

code	country	2011	2012	2013	2014	2015
524	Nepal	1	1	1	1	1
528	Netherlands	1	1	1	1	1
548	Vanuatu	1	1	1	-9	-9
554	New Zealand	1	1	1	1	1
558	Nicaragua	1	1	1	1	1
562	Niger	1	1	1	1	1
566	Nigeria	1	1	1	-9	1
578	Norway	0	0	0	0	0
583	Micronesia	-9	-9	-9	-9	-9
584	Marshall Islands	-9	-9	-9	-9	-9
585	Palau	-9	-9	-9	-9	-9
586	Pakistan	1	1	1	-9	1
591	Panama	1	1	1	1	1
598	Papua New Guinea	1	1	1	-9	-9
600	Paraguay	1	1	1	1	1
604	Peru	1	1	1	1	1
608	Philippines	1	1	1	1	1
616	Poland	1	1	1	1	1
620	Portugal	1	1	1	1	1
624	Guinea-Bissau	-9	1	-9	-9	-9
626	Timor-Leste	-9	-9	-9	1	-9
630	Puerto Rico	-9	-9	-9	-9	-9
634	Qatar	0	0	0	-9	0
642	Romania	1	1	1	1	1
643	Russian Federation	1	1	1	1	1
646	Rwanda	1	1	1	-9	1
659	St. Kitts and Nevis	-9	1	-9	-9	-9
662	St. Lucia	-9	-9	-9	-9	-9
670	St. Vincent and the Grenadines	-9	-9	-9	-9	-9
674	San Marino	-9	-9	-9	-9	-9
678	Sao Tome and Principe	0	0	0	-9	-9
682	Saudi Arabia	-9	0	-9	-9	-9
686	Senegal	1	1	1	1	1
688	Serbia	1	1	1	1	1
690	Seychelles	-9	1	-9	-9	-9
694	Sierra Leone	1	1	1	-9	-9
702	Singapore	-9	0	-9	-9	-9
703	Slovakia	1	1	1	1	1
704	Vietnam	1	1	1	1	1
705	Slovenia	1	1	1	1	1
706	Somalia	-9	1	-9	-9	-9
710	South Africa	1	1	1	1	1
716	Zimbabwe	1	1	1	-9	1
724	Spain	1	1	1	1	1

Institutional arrangements regarding Minimum Wage Setting in 195 countries

code	country	2011	2012	2013	2014	2015
728	South Sudan	-9	-9	-9	-9	0
729	Sudan	1	1	1	-9	1
740	Suriname	0	0	0	-9	-9
748	Swaziland	1	1	1	1	1
752	Sweden	0	0	0	0	0
756	Switzerland	0	0	0	0	0
760	Syrian Arab Republic	1	1	1	1	1
762	Tajikistan	1	1	1	-9	-9
764	Thailand	1	1	1	-9	1
768	Togo	1	1	1	1	1
776	Tonga	-9	-9	-9	-9	-9
780	Trinidad and Tobago	1	1	1	-9	-9
784	United Arab Emirates	0	0	0	-9	-9
788	Tunisia	1	1	1	-9	1
792	Turkey	1	1	1	-9	1
795	Turkmenistan	-9	-9	-9	-9	-9
798	Tuvalu	-9	-9	-9	-9	-9
800	Uganda	1	1	1	-9	1
804	Ukraine	1	1	1	1	1
807	Macedonia	1	1	1	1	1
818	Egypt	1	1	1	-9	1
826	United Kingdom	1	1	1	1	1
834	Tanzania	1	1	1	1	1
840	United States	1	1	1	1	1
854	Burkina Faso	1	1	1	1	1
858	Uruguay	1	1	1	1	1
860	Uzbekistan	1	1	1	1	1
862	Venezuela	1	1	1	-9	1
882	Samoa	1	1	1	1	1
887	Yemen	1	0	1	1	1
894	Zambia	1	1	1	1	1
985	Kosovo	-9	-9	-9	-9	-9

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