

# Constitutional Commitment to Social Security and Welfare Policy<sup>1</sup>

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## ABSTRACT

In this paper we explore whether the constitutional text has any practical meaning for welfare policy. To examine the empirical importance of the constitution, we first constructed for 68 countries an index of constitutional commitment to social security in five areas: Old Age, disability and survivors (OASDI), Unemployment, Sickness, Work Injury and Income Support. We find that the extent and coverage of social security laws is not sensitive to the degree of constitutional commitment to social security.

**Key words:** Welfare Policy, Social Security, Constitution, Legal Origins

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## Introduction

The history of constitutional human rights is stratified into three generations. Civic rights such as the freedom of expression are perceived as the first generation, political rights such as the right to vote comprise the second generation, and social rights such as the right to live in dignity are the third generation. Most countries include the first two generations of rights in their constitution, but they differ significantly in the scope and degree of commitment to social rights. In some countries there is not even a mention of social rights in their constitutions.

There is extensive literature on the consequences of electoral rules and forms of government as outlined in the constitution on economic policy outcomes. For example, Persson and Tabellini (2004) found that constitutional rules have a significant effect on key fiscal policy and corruption.<sup>2</sup> The implication is that the constitutional text has more than a declarative role in this regard. But does the constitution have any practical meaning when it comes to social rights?

In a companion paper (Ben-Bassat and Dahan, 2003) we have constructed indices to assess the degree of constitutional commitment to five social rights (Social Security, Education, Health, Housing and Workers' Rights). While we did not trace a robust and significant effect of constitutional commitment to education and health on education and health expenditures, we did find a positive relationship between the degree of constitutional commitment to social security and transfer payments (as a share of GDP). This finding is consistent with the claim that the constitution is more than a piece of paper in the sense that the constitutional text might be important for public policy.

The positive association between constitutional commitment to social security and transfer payments motivated us to go a step further to examine the transmission mechanism. If the constitution does have an effect on welfare policy, this should emerge in the connection between the degree of commitment to social security in the *constitution* and the extent and coverage of social security *laws*. The importance of the constitutional text for policy is in question if it does not survive this test.

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<sup>2</sup> See Persson and Tabellini (2003) book for an excellent survey of the empirical evidence.

The goal of this paper is to explore whether the constitutional text regarding social security plays a role in shaping social security policy. Social security is one of the main pillars of the modern welfare state. In fact, social security expenditures account for a large chunk of government outlays in a typical developed country. The European average share of social security expenditure is 24.8% of GDP while the world average is 14.5% (ILO, 2000).

Most social security programs are formulated as entitlements, and so it helps to quantify the extent and coverage of social security programs in a relatively meaningful way. Naturally, the constitutional commitment to a particular right must be examined in terms of the associated social security law. This makes room for a range of effects of constitutional commitment on various components of social security. For example, the constitutional commitment to Old Age, compared to Unemployment, may have a different effect on social security policy. This type of detailed examination provides a more stringent test of the importance of constitutional text on social policy.

In the next section we present the criteria used to translate the constitutional text into quantitative indices that reflect the constitutional commitment to social security. In Section 3 we examine whether our indices are correlated with legal origins and religious beliefs. In Section 4 we look at the effect of constitutional text on the extent and coverage of social security laws. Section 5 concludes the paper.

## 2. Indices of Constitutional Commitment to Social Security

In this section we construct constitutional indices of social security rights according to the constitutional text, and ignoring court interpretations. There is wide variability in constitutional social security rights, ranging from the U.S. and Australia, where social security rights are absent, to Switzerland and Brazil, which have a high constitutional commitment to social security.

Our paper relates to 64 countries with a written constitution and four which have a legal document with a higher status than regular law. In Canada, New Zealand and

Israel there are basic laws which have a legal status similar to a constitution. England does not have basic laws, but it does have a Human Rights Act that has higher status than regular law.<sup>3</sup> Our two main sources are the English translation of the constitution in the ICL and Confinder web sites.<sup>4</sup>

A constitutional social right is defined here as one that grants a personal entitlement to monetary transfers (including social insurance). That right may affect permanent income and welfare. Those social rights provide a social safety net and would seem to have a positive impact on income equality, at least in the short run.

There are five groups of social security rights in a constitution, and each of them may contain one or more features. The five rights are the following:

1. The three most basic features of social security as reflected in textbooks in Public Economics<sup>5</sup> are: pension, disability and survivors (OASDI)
2. The right to live in dignity, usually expressed by income support to the poor
3. Unemployment insurance
4. Sickness insurance
5. Work injury insurance

There is considerable variance between countries as regards the degree of constitutional commitment to social security rights, ranging from concrete policy action in some countries to a general statement reflecting a vague commitment in others. We rank the degree of constitutional commitment on a scale from 0 to 3, with a rank of 0 denoting a right that is absent from the constitution.

A rank of 1 is given if the constitution includes a general statement with regard to a particular social security right. In that case it is clear that it is possible to introduce a

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<sup>3</sup> From Section 3 in the English Human Rights Act it can be inferred that ordinary laws are subject to the Human Rights Act. Any law should be examined in the light of the Human Rights Law. In case the suggested law is in contradiction to the Human Rights Act, the law may still be passed, provided the parliament is aware of this.

<sup>4</sup> [International Constitutional Law http://www.uni-wuerzburg.de/law](http://www.uni-wuerzburg.de/law)

<sup>5</sup> "This [OASDI] is usually referred to as social security and is intended to provide a basic standard of living to the old aged, the disabled, and their survivors." (Stiglitz, 2000: page 353).

law concerning that right. A rank of 2 is given if the constitution guarantees a minimal level with respect to that right such as “a minimum standard of living,” or “a life of dignity,” in the case of income support and “adequate insurance” in the case of unemployment. A rank of 3 is given if the constitution has a high degree of commitment and concreteness. For example, a commitment “to maintain the real value” of social security benefits justifies a rank of 3.

We use the two most common constitutional social security rights – the right to pension in old age and the right to unemployment insurance – to illustrate the ranking process.

*The right to old age, survivors and disability (OASDI)*

Each of the three features constituting the right to OASDI was ranked as shown in Table 1. The overall rank is a simple average across all three features. The most popular rights are old age pension (41 countries), and assistance to the disabled (39 countries), while support to survivors is less frequent (28 countries).

**Table 1: Criteria for ranking the constitutional commitment to old age, survivors and disability (OASDI)**

	rank
<b>The right is absent from the constitution</b>	0
<b>General statement</b> The state “guarantees” or “promotes” social security insurance, or “every person is entitled to social security”	1
<b>Weak commitment</b> Old age, disabled and survivors are entitled to a “minimum standard of living,” “basic income,” “adequate income” or “to live in dignity”	2
<b>Strong commitment</b> In addition to the guarantee of “adequate income,” the constitution specifies the elements of what is adequate income in terms of food, housing etc., or a periodical adjustment mechanism such as COLA.	3

We use the constitution of Switzerland as an example of a country that receives a rank of 3 as regards OASDI rights. To quote the Swiss constitution: *“The confederation shall take measures for adequate social security for the elderly, survivors, and disabled persons. The insurance shall be mandatory. The pensions must cover basic living expenses appropriately. The maximal pension shall not exceed twice the minimal pension. The pension shall at least be adapted to the development of prices .”* The key elements that are responsible for its high rank are: the insurance is mandatory, there are limits on minimal amounts and the pension is adjusted to prices.

The constitution of Italy guarantees support just to two groups usually included in OSDAI – the elderly and the disabled, as may be seen from the following quote: *“Workers shall be entitled to adequate insurance for their needs in case of accident, illness, disability, old age, and involuntary unemployment.”* The constitution assures that workers will receive adequate insurance, but it does not mention any further details such as periodical adjustment. Because of its weak commitment it gets a rank of 2 for each group covered, but since only two out of three potential groups are covered the overall rank is 1.333.

India’s constitution contains a general statement concerning the two features of the right to OASDI; each of them earns a rank of 1, as is indicated by the following quote: *“The state shall, within the limits of its economic capacity and development, make effective provision for securing the right to public assistance in cases of unemployment, old age, sickness and disablement.”*

#### *The right to unemployment insurance*

The commitment to unemployment insurance is usually formulated along the same lines of other social security rights, such as old age pension and sickness insurance. In many constitutions they are even formulated as part of the same article, as shown for Italy and India in the previous section. Therefore, the unemployment insurance commitment was ranked by the same scale presented in Table 1.

Brazil is an excellent example of a country that is strongly committed to unemployment insurance (rank: 3), as is indicated by the following quote: *“The social security plans shall, upon contribution, pursuant to the law, provide protection*

*of workers who are involuntarily unemployed. Adjustment of the benefits is ensured so as to permanently maintain their real value according to criteria defined in the law.”*

The commitment of Hungary is weaker (rank: 2), as expressed in the following quote: *“Citizens of the Republic of Hungary have the right to social security; they are entitled to the support required to live in old age, and in the case of sickness, disability, being widowed or orphaned and in the case of unemployment through no fault of their own.”* Hungary grants entitled citizens “the support required to live,” but do not provide any extra element, such as a periodical price adjustment.

A rank of 1 is given if the constitution includes a general statement with regard to unemployment insurance. A typical example appears in the constitution of Egypt – *“All citizens have the right to pensions in cases of incapacity, unemployment, and old age, in accordance with the law.”* It does not include any characteristic beyond a general statement and it is even more restricted in the sense that the translation of this right should be consistent with the (regular) law.

The constitutional commitment to all social security rights were ranked according to these criteria, and the data set for each characteristic are presented in Table 1.

### **3. Commitment to social security, traditions and religious beliefs**

The constitutional commitment to social security may be regarded as the core of the modern welfare state. The right to social security appears in the constitution of 47 countries with different levels of commitment. In half the countries, the rank value is less than 1 and the average is 0.56, reflecting a relatively low level of constitutional commitment. We found a high level of constitutional commitment in four countries: Brazil, Finland, Portugal and Switzerland.

The constructed index of constitutional commitment to social security is composed of five features: Old Age (including survivors and disability), Unemployment, Sickness,

Work Injury and Income Support. The most prevalent social security right in the constitutions is Old Age, which appears in 43 countries, while Work Injury insurance appears only in 11 countries.

### 3.1 CCSS and legal origins

At first glance it is hard to find common economic, cultural or other characteristics among countries that share a similar degree of constitutional commitment to social security (Table 1). For example, the Scandinavian countries are spread all over the scale. Finland is closer to Latin-American countries, Sweden has the same constitutional commitment as South Korea, while Norway belongs to a group of countries in which social security is absent from the constitution.

All of the countries in our sample were classified by legal origins, in accordance with the groups suggested by Reynolds and Flores (1989). The two main legal traditions are English common law and French civil law, derived from Roman law. We followed a series of studies showing the importance of legal origins for economic performance [La-Porta *et al* (1997, 1998, 1999), Glaeser and Shliefer (2002) and Botero *et al* (2004)].

The concept underlying the Common Law tradition is to protect citizens from the power of government. It began to develop in the 17<sup>th</sup> century, with the empowerment of the parliament and aristocracy at the expense of the monarchy, and concomitant greater constraints on the power of the king (Finer, 1997). In contrast, the civil law tradition, especially after codification in the 19<sup>th</sup> century, gives the government more power to run the life of its citizens (Finer, 1997). There are three groups of countries that follow the civil law tradition—French, Scandinavian and German.

In Eastern Europe the legal tradition is relatively new and its roots are in the former socialist pattern of the Soviet Union, which is far more centralized than civil law. Each country in our sample is classified into one of the five groups according to its legal tradition: English common law, French civil law, German, Scandinavian and socialist.



It is striking that seven out of the top ten countries ranked according to our summary index of constitutional commitment to social security are French civil law countries: Portugal, Italy and five Latin American countries (Table 2). This finding, with regard to Latin American countries, is surprising in light of the high level of income inequality in those countries.

In contrast, no common law country is part of the top ten. According to our constitutional commitment index, there are 21 countries where all five social security rights are absent. Thirteen of those are common law countries, while only four are French civil law countries.

In Table 3 we test the hypothesis that the constitutional commitment to social security rights is related to legal origins, controlling for level of development and propensity to democracy. All equations are estimated with OLS, where each social security right serves as a dependent variable at one time. We find that countries that are classified as French civil law have a much higher constitutional commitment to social security than do common law countries (the omitted variable), after controlling for GDP per capita and democracy. This is a highly significant result.

This finding repeats itself for all five social security rights separately (Table 3). The coefficient reflects quite a large effect: The coefficient for the summary index of constitutional commitment to social security is around 0.61, where the sample mean of our index is 0.56. Countries belonging to the socialist tradition, Scandinavian or German legal origins do not express different constitutional commitment to social security as compared to common law countries. At first glance, it is somewhat surprising to find that French civil law countries have on average a higher constitutional commitment to social security than post-socialist countries. Most socialist countries are in transition to a market economy, however, and some of them have rewritten their constitutions in recent years.

Given the fact that the top ten (or even twenty) countries are disproportionately populated by Latin American countries, it is natural to examine the results' sensitivity to the inclusion of a dummy variable for Latin American countries. We found that in general the results are similar (Table 4). However, the introduction of a Latin

American dummy variable leads to a lower coefficient for French civil law countries, without a change in ordering: countries with a socialist tradition, Scandinavian or German legal origins are not statistically different from common law countries.

### 3.2 CCSS and religious beliefs

It is natural to examine whether the constitutional text is related to the religious beliefs of each society.<sup>6</sup> We use the shares of population that have Protestant, Catholic, Muslim and other beliefs as explanatory variables controlling for GDP per capita. Table 5 presents OLS regressions for each of the five constitutional commitments to social security features in addition to a summary index of social security.

The picture that emerges here is much less clear than that regarding legal origins. In general we find that countries which have a higher share of population with Catholic beliefs tend to have higher constitutional commitment to social security as compared to Protestant (and other beliefs) countries.

However, that effect is statistically significant only regarding *sickness* and *work injury*. The effect of Catholic beliefs for the other three social security rights is positive but insignificant. The Catholic coefficient is not significant at the standard level in the regression of our summary index of constitutional commitment to social security.

The quantitative impact of Catholic beliefs is quite large, but only for those coefficients that are significant. In addition, the Catholic effect does not survive the inclusion of a dummy variable for Latin American countries (Table 6). In the case of the constitutional commitment to work injury, the Catholic coefficient becomes insignificant, and in the case of sickness the quantitative impact implied by the estimated coefficient is much less.

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<sup>6</sup> Note that there is some overlapping between legal origins and religious beliefs, and in particular between Catholic and French civil law.

## 4. Social security in the constitution and in practice

The commitment to social security in the constitution might reflect social preferences but does not necessarily translate into government policy. Naturally, the constitution does not imply concrete policy actions, delineating a path for policy makers. There may, therefore, be a weak or even no relationship between constitutional commitment and welfare policy.

This paper examines the empirical correlation between our indices of constitutional commitment to social security and the generosity implied in five features of social security laws. If the constitutional text with respect to social insurance has any practical meaning it should appear in the extent and coverage of social security laws.

We should expect to have a positive correlation between welfare policy indicators and our index of constitutional commitment to social security if the constitutional text has any practical meaning. The danger of reverse causality arises in most studies using regression analysis. However, the risk of reverse causality is less likely in our case to the extent that constitutions reflect beliefs and values. While government policy may lead to changes in the constitution, this is rare. Values and beliefs may change over time, but this is a slow process that does not necessarily have an immediate impact on the constitution.

Alternatively, no relations between the constitutional text and welfare policy may reflect the fact that the constitution has a solely declarative role. Various policies might be consistent with the same constitutional commitment to social security. Unlike civic and political rights, social security rights might be less binding because of the qualitative nature of these rights.

No empirical relations could be also the result of the fact that public policy is shaped by social preferences which are not yet in the constitution, and may never be. In this case, we do not expect to find any relation between welfare policy and social security rights (which by construction equal zero), unless there is a systematic bias in the sense

that countries that are more welfare-state oriented tend to omit social security rights from their constitution.

The last hypothesis—a somewhat cynical one—is that the constitutional text embodies the very opposite of the real beliefs that dictate welfare policy. In such regimes the constitution is merely of propaganda value. In this case we would expect to find a negative relation between constitutional commitment to social security and the extent of social insurance coverage.

Before turning to regression analysis, Table 7 presents a simple matrix for four different features of social security: Old age, Unemployment, Work Injury and Sickness. The columns describe whether a particular feature exists in the constitution (regardless of its degree of commitment), and the rows represent whether that same feature appears in the regular laws as they are documented in *Social Security Throughout the World 2004*.

Panels A and B of Table 7 show that Old Age (including survivors and disability) and Work Injury laws exist in all countries. Those countries that have not mentioned Old Age (25 countries in our sample) and Work Injury (57 countries in our sample) in their constitution still provide these social insurance features. This simple matrix implies that the lack of constitutional commitment to a certain social security feature is not translated to an absence of that particular feature from social security law.

The other off-diagonal cells in four panels of Table 7 are even more interesting. They answer the question of whether there are countries that have expressed commitment to particular features of social security and yet do not provide coverage at all. We find 6 such countries in the case of Unemployment and two countries in the case of Sickness. However, it is hard to draw conclusions from this finding due to data limitations. Unfortunately, the *Social Security Throughout the World* publication pooled together countries that do not have a particular feature of social security with countries for which the data is unavailable.

Our focus here is to examine the effect of constitutional commitment to social security on welfare policy, controlling for a list of control variables that is standard in

this literature.<sup>7</sup> Our control variables are GDP per capita, the propensity to democracy and the share of the population over age 65.

The data for GDP per capita is an average for 1990–1999, taken from the Penn World Tables for all countries except Taiwan. Income per capita serves as an indicator of the level of economic development, which may influence social preferences for public consumption (versus private consumption), as well as a more developed tax-collection system (‘Wagner’s law’).

A large share of social security expenditure goes to the population over the age of 65. Hence, the average share of the population aged above 65 for 1990 –1999 is one of the control variables (taken from World Bank Data).

## Regression analysis

In this paper we provide two ways to examine the relationship between constitutional commitment to social security and welfare policy. In general, expenditures such as transfer payments are a complex combination of the extent of social security coverage as determined by social security laws and “exogenous variables” such as take-up rate, demographic composition and aggregate unemployment rate (in the case of unemployment expenditures). We first use the following econometric model to test the effect of constitutional commitment to social security:

$$(i) \text{ TR} = a_0 + a_1 Y + a_2 \text{CCSS} + \varepsilon,$$

where TR denotes government expenditures on actual transfer payments, Y is a vector of various control variables such as demographic composition, and CCSS stands for constitutional commitment to social security.

The coefficient of CCSS captures the pure effect of social security laws to the extent that we control for exogenous variables, which is not always possible. In addition, this

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<sup>7</sup> For example, Rodrik (1998), Taveres and Wacziarg (2001) and Mulligan, Gil and Sala-i-Martin

type of econometric model assumes that transfer payments are a linear combination of social security laws and exogenous variables.

Alternatively, we use a somewhat more direct way to estimate the effect of constitutional commitment to social security on the extent and coverage of social security laws:

$$(ii) \text{ LAWS} = \beta_0 + \beta_1 Z + \beta_2 \text{CCSS} + u \text{ ,}$$

where LAWS represents an index of the generosity of social security laws,  $Z$  is a vector of various control variables, and CCSS is as before.

In an estimated model of type (ii) the empirical challenge is to construct a meaningful index that captures the extent and coverage of social security laws. Note that the generosity of social security laws may be related to the size of the eligible population. Social entitlements may be more generous with a larger eligible population because of political considerations through a median voter effect, or less generous due to budget considerations.

Table 8 presents several regressions for various indices of the generosity of social security. In this first column we replicate the Ben-Bassat and Dahan (2003) regression, where a summary index of constitutional commitment to social security was found to be with a positive coefficient in the share of transfer payments in GDP. The estimated coefficient reflects a substantial quantitative effect. An increase of one standard deviation in the constitutional commitment to social security would induce a rise of 1.7 percentage points in the share of transfers in GDP if this correlation reflects a causal relationship.

The effect of GDP per capita on transfer payments is positive (as expected by Wagner's law), but it is significant only when the share of the population over age 65 is not included. However, the positive effect of the elderly population on transfer payments is not sensitive to the inclusion of other variables, such as democracy. The

insignificant effect of democracy on social spending was found also in Mulligan, Gil and Sala-i-Martin (2002).

Nevertheless, transfer payments as a proxy for the extent and coverage of social security suffers from two main limitations. First, transfer payments include social security expenditures in addition to other government transfers. Second, the issue of data availability makes it hard to control for all the relevant factors. It is important to the extent that the error term in a model of type (i) described above is correlated with the omitted variables. Third, the international institutions that collect and publish budgetary data are always careful to add footnotes regarding the limitations of comparing fiscal data across countries. In fact, we found large discrepancies between various sources in the data on social security expenditures or transfer payments.

In column 2 (Table 8) we run a regression where the dependent variable is the contribution rate for all social security programs (taken from *Social Security Throughout the World 2004*). The contribution rate as an indicator for the extent and coverage of social security programs is more comparable across countries than transfer payments.

Nonetheless, the limitation of that proxy is clear: social security benefits may be more generous than what is implied by the contribution rate in countries that have experienced long and substantial actuarial deficits. However, Mulligan and Sala-i-Martin (2004) report on a relatively large correlation between the amount of revenue collected by payroll taxes and social security expenditures. We find, however, that the coefficient of constitutional commitment to social security becomes insignificant once we replace transfer payments with the contribution rate.

In a recent paper, Botero *et al* (2004) constructed an index of social security coverage for 85 countries. We use their summary index of social security coverage instead of transfer payments as a proxy for social security coverage (52 countries exist both in their and our samples). Once again, the coefficient of constitutional commitment to social security turns out to be insignificant as in the case with the contribution rate.

The summary index of social security coverage by Botero *et al* (2004) is built on three different indices: Old Age (including survivors and disability), Unemployment and Sickness. It allows us to test our hypothesis more directly by regressing a particular constitutional commitment on its respective social security feature. As before, we find no empirical relation between constitutional commitment to social security and social security in practice in all three features separately: Old Age, Unemployment and Sickness (Table 9). In table 10 we go further to test the effect of constitutional commitment to Unemployment separately on four components of the extent and coverage of unemployment law as calculated by Botero *et al* (2004). The coefficients of constitutional commitment to Unemployment are insignificant in all four regressions.

## 5. Conclusion

In this paper we have constructed for 68 countries five indices of constitutional commitments to social security rights: Old Age (including Survivors and Disability), Unemployment, Sickness, Work Injury and Income Support. The commitment to Old Age appears in the constitution of 43 countries while only 11 countries have a constitutional commitment to Work Injury.

21 countries preferred not to include any social security right, but nevertheless in practice they do provide social security. In general, in countries that have social security rights in their constitutions the degree of commitment is relatively low; some countries lower it further by adding that those rights should be in accordance with the law. This may reflect the fear that constitutional commitment might undermine the flexibility of economic policy to adjust to environment changes such as macroeconomic fluctuations or preferences toward government involvement.

We find that countries that share the tradition of French civil law generally have a higher constitutional commitment to social security than countries adhering to the English common law tradition. We have not found a clear and significant difference between German, Scandinavian or Socialist traditions and English common law tradition.



In a previous paper (Ben-Bassat and Dahan, 2003) we found a significant correlation between constitutional commitment to social security and transfer payments. If the constitution does have an effect on welfare policy it must show up in the connection between the degree of commitment to social security in the *constitution* and the extent and coverage of social security *laws*. In this paper we found no support for the effect of constitutional commitment to social security on social policy when using various measures of social security coverage in regular laws instead of transfer payments as an indicator for social policy.

This finding may reflect the nature of constitutional social rights. The practical translation of constitutional civic rights such as the right to vote is clear. In contrast, the translation of social rights such as unemployment insurance may be expressed by various level of generosity. For example, the replacement rate and the period of entitlement may be different even for the same degree of constitutional commitment to unemployment insurance.

**Table 1: Indices of constitutional commitment to social security**

	Summary index of Social Security	Income Support	Unemployment	Sickness	Work Injury	Old Age, Survivors and Disability
Albania	0.43	1	0	0	0	0.66
Argentina	0.43	0	0	0	0	1.00
Australia	0.00	0	0	0	0	0.00
Austria	0.00	0	0	0	0	0.00
Bahrain	0.71	0	1	1	0	1.00
Belgium	0.43	0	0	0	0	1.00
Bolivia	0.86	0	1	1	1	1.00
Brazil	3.00	3	3	3	3	3.00
Bulgaria	0.43	0	1	0	0	0.66
Cameroon	0.00	0	0	0	0	0.00
Canada	0.00	0	0	0	0	0.00
Chile	0.43	1	0	0	0	0.66
China	0.86	2	0	0	0	1.33
Colombia	0.43	0	0	0	0	1.00
Cyprus	0.86	0	0	0	0	2.00
Czech Republic	0.00	0	0	0	0	0.00
Denmark	0.14	1	0	0	0	0.00
Dominican Republic	1.57	3	2	2	0	1.33
Ecuador	1.29	2	0	1	1	1.66
Egypt	0.43	0	1	0	0	0.66
El Salvador	0.43	0	0	0	0	1.00
Fiji	0.00	0	0	0	0	0.00
Finland	2.14	3	3	0	0	3.00
France	0.43	2	0	0	0	0.33
Germany	0.00	0	0	0	0	0.00
Greece	0.00	0	0	0	0	0.00
Hungary	1.43	0	2	2	0	2.00
Iceland	0.14	1	0	0	0	0.00
India	0.57	1	1	1	0	0.66
Indonesia	1.00	1	0	0	0	2.00
Iran	0.71	0	1	0	1	1.00
Ireland	0.43	0	0	0	0	1.00
Israel	0.00	0	0	0	0	0.00
Italy	1.71	2	2	2	2	1.33
Japan	0.14	1	0	0	0	0.00
Jordan	0.00	0	0	0	0	0.00
Kenya	0.00	0	0	0	0	0.00
Malta	0.86	1	1	1	1	0.66
Mexico	0.86	0	1	1	1	1.00
Nepal	0.43	0	0	0	0	1.00
Netherlands	0.14	1	0	0	0	0.00
New Zealand	0.00	0	0	0	0	0.00
Nicaragua	1.86	3	2	0	2	2.00
Norway	0.00	0	0	0	0	0.00
Panama	1.14	0	2	1	1	1.33
Paraguay	0.43	1	0	0	0	0.66
Philippines	0.00	0	0	0	0	0.00
Poland	0.57	1	0	1	0	0.66
Portugal	2.00	2	2	2	0	2.66
Romania	0.29	0	1	0	0	0.33
Sierra Leone	0.29	0	0	0	0	0.66
Singapore	0.00	0	0	0	0	0.00
South Africa	0.86	3	0	0	0	1.00
South Korea	0.43	0	0	0	0	1.00
Spain	1.00	2	2	0	0	1.00
Sri Lanka	0.00	0	0	0	0	0.00
Sweden	0.43	0	0	0	0	1.00

Switzerland	2.14	1	3	1	1	3.00
Syria	0.57	0	0	1	0	1.00
Taiwan	0.43	0	0	0	0	0.66
Thailand	0.00	0	0	0	0	0.00
Trinidad	0.00	0	0	0	0	0.00
Tunisia	0.43	0	0	0	0	1.00
Turkey	0.29	0	0	0	0	1.00
United Kingdom	0.00	0	0	0	0	0.00
United states	0.00	0	0	0	0	0.00
Uruguay	1.71	0	2	2	2	2.00
Zambia	0.00	0	0	0	0	0.00
<b>Mean</b>	0.56	0.57	0.5	0.33	0.23	0.78
<b>Standard deviation</b>	0.65	0.92	0.86	0.67	0.59	0.81
<b>No. of countries with positive value</b>	47	23	20	16	11	43
<b>Mean for countries with positive value only</b>		1.70	1.70	1.44	1.46	1.23

**Table 2: Constitutional commitment to social security and legal origins**

(Countries are ranked by a summary index of constitutional commitment to social security)

Rank	Country	Legal Origins	Summary Index of Social Security	Rank	Country	Legal Origins	Summary Index of Social Security
1	Brazil	F	3.00	35	Paraguay	F	0.43
2	Finland	SD	2.14	36	Chile	F	0.43
3	Switzerland	G	2.14	37	France	F	0.43
4	Portugal	F	2.00	38	Colombia	F	0.43
5	Nicaragua	F	1.86	39	Sweden	SD	0.43
6	Uruguay	F	1.71	40	Tunisia	E	0.43
7	Italy	F	1.71	41	Turkey	F	0.29
8	Dominican Republic	F	1.57	42	Sierra Leone	E	0.29
9	Hungary	S	1.43	43	Romania	S	0.29
10	Ecuador	F	1.29	44	Iceland	SD	0.14
11	Panama	F	1.14	45	Denmark	SD	0.14
12	Indonesia	F	1.00	46	Netherlands	F	0.14
13	Spain	F	1.00	47	Japan	G	0.14
14	Bolivia	F	0.86	48	Austria	G	0.00
15	South Africa	E	0.86	49	Australia	E	0.00
16	Malta	F	0.86	50	United states	E	0.00
17	Mexico	F	0.86	51	United Kingdom	E	0.00
18	China	S	0.86	52	Germany	G	0.00
19	Cyprus	E	0.86	53	Zambia	E	0.00
20	Iran	F	0.71	54	Trinidad	E	0.00
21	Bahrain	E	0.71	55	Greece	F	0.00
22	India	E	0.57	56	Jordan	F	0.00
23	Syria	F	0.57	57	Israel	E	0.00
24	Poland	S	0.57	58	Norway	SD	0.00
25	Ireland	E	0.43	59	New Zealand	E	0.00
26	El Salvador	F	0.43	60	Singapore	E	0.00
27	Albania	S	0.43	61	Sri Lanka	E	0.00
28	Argentina	F	0.43	62	Fiji	E	0.00
29	Bulgaria	S	0.43	63	Philippines	F	0.00
30	Belgium	F	0.43	64	Czech Republic	S	0.00
31	South Korea	G	0.43	65	Cameroon	F	0.00
32	Taiwan	G	0.43	66	Canada	E	0.00
33	Egypt	F	0.43	67	Kenya	E	0.00
34	Nepal	E	0.43	68	Thailand	E	0.00

**Table 3: Legal origins and constitutional commitment to social security**  
(the dependent variable- an index of constitutional commitment to social security)

	(1)	(2)	(3)	(4)	(5)	(6)
	Income Support	Unemployment	Sickness	Average of Old Age, Disability and Survivors	Work Injury	Summary Index of Social Security
<b>Constant</b>	0.808 (0.601)	0.047 (0.040)	0.107 (0.110)	0.813 (0.680)	0.617 (0.740)	0.543 (0.580)
<b>Log GDP Per-Capita</b>	-0.114 (-0.650)	-0.019 (-0.120)	-0.031 (-0.250)	-0.051 (-0.340)	-0.101 (-0.950)	-0.058 (-0.490)
<b>Democracy</b>	0.567 (1.200)	0.328 (0.750)	0.385 (1.130)	0.055 (0.130)	0.407 (1.400)	0.271 (0.840)
<b>French</b>	<b>0.643<sup>a</sup></b> (2.264)	<b>0.669<sup>a</sup></b> (2.710)	<b>0.497<sup>a</sup></b> (2.610)	<b>0.648<sup>a</sup></b> (2.800)	<b>0.521<sup>a</sup></b> (3.200)	<b>0.612<sup>a</sup></b> (3.390)
<b>Socialist</b>	0.342 (0.850)	0.460 (1.220)	0.313 (1.070)	0.403 (1.140)	-0.030 (-0.120)	0.334 (1.210)
<b>German</b>	0.176 (0.370)	0.432 (0.960)	0.028 (0.080)	0.447 (1.060)	0.199 (0.670)	0.313 (0.950)
<b>Scandinavian</b>	0.765 (1.570)	0.422 (0.930)	-0.182 (-0.520)	0.448 (1.050)	-0.007 (-0.02)	0.336 (1.01)
<b>Adj. R<sup>2</sup></b>	0.037	0.032	0.059	0.029	0.117	0.084
<b>Number of Observations</b>	67	67	67	67	67	67

The t statistics are reported in the parentheses.

a. Significance at 1%

**Table 4: Legal origins and constitutional commitment to social security**  
***With Latin American dummy***  
 (the dependent variable- an index of constitutional commitment to social security)

	(1)	(2)	(3)	(4)	(5)	(6)
	Constitutional commitment to:					
	Income Support	Unemployment	Old Age, Survivors and Disability	Sickness	Work Injury	Summary Index of Social Security
<b>Constant</b>	0.783 (0.550)	-0.335 (-0.260)	0.217 (0.180)	-0.246 (-0.240)	-0.154 (-0.200)	0.060 (0.060)
<b>Log GDP Per-Capita</b>	-0.110 (-0.600)	0.034 (0.200)	0.033 (0.210)	0.019 (0.150)	0.008 (0.080)	0.010 (0.090)
<b>Democracy</b>	0.557 (1.130)	0.187 (0.410)	-0.164 (-0.390)	0.255 (0.720)	0.123 (0.450)	0.093 (0.280)
<b>French</b>	<b>0.634<sup>b</sup></b> (2.100)	<b>0.524<sup>c</sup></b> (1.870)	<b>0.422<sup>c</sup></b> (1.640)	<b>0.363<sup>c</sup></b> (1.690)	0.229 (1.360)	<b>0.430<sup>b</sup></b> (2.140)
<b>Socialist</b>	0.343 (0.840)	0.473 (1.250)	0.423 (1.220)	0.326 (1.120)	-0.003 (-0.020)	0.351 (1.300)
<b>German</b>	0.175 (0.360)	0.410 (0.910)	0.412 (0.990)	0.008 (0.020)	0.154 (0.570)	0.285 (0.880)
<b>Scandinavian</b>	0.764 (1.560)	0.401 (0.880)	0.415 (0.990)	-0.201 (-0.580)	-0.050 (-0.180)	0.310 (0.950)
<b>Latin America</b>	0.025 (0.070)	0.380 (1.100)	<b>0.592<sup>c</sup></b> (1.860)	0.351 (1.320)	<b>0.766<sup>a</sup></b> (3.680)	<b>0.480<sup>b</sup></b> (1.930)
<b>Adj. R<sup>2</sup></b>	0.020	0.035	0.067	0.070	0.269	0.120
<b>Number of Observations</b>	67	67	67	67	67	67

The t statistics are reported in the parentheses.  
 a. Significance at 1%; b. Significance at 5%; c. Significance at 10%.

**Table 5: Religious beliefs and constitutional commitment to social security**  
(the dependent variable- an index of constitutional commitment to social security)

	(1)	(2)	(3)	(4)	(5)	(6)
	Constitutional commitment to:					
	Income Support	Unemployment	Sickness	Old Age, Disability and Survivors	Work Injury	Summary Index of Social Security
<b>Constant</b>	1.487 (1.080)	0.755 (0.580)	-0.019 (-0.020)	0.889 (0.720)	0.403 (0.460)	0.736 (0.770)
<b>Log GDP Per-Capita</b>	-0.062 (-0.480)	-0.023 (-0.190)	-0.006 (-0.070)	-0.031 (-0.270)	-0.045 (-0.550)	-0.031 (-0.340)
<b>Catholic</b>	0.043 (0.087)	0.493 (1.061)	<b>0.904<sup>a</sup></b> (2.563)	0.005 (1.230)	<b>0.646<sup>b</sup></b> (2.060)	0.534 (1.551)
<b>Muslim</b>	<b>-0.987<sup>c</sup></b> (-1.708)	-0.169 (-0.311)	0.325 (0.788)	0.002 (0.550)	0.111 (0.302)	-0.001 (-0.003)
<b>Other</b>	-0.750 (-1.369)	-0.527 (-1.022)	0.102 (0.261)	-0.002 (-0.520)	-0.049 (-0.140)	-0.291 (-0.763)
<b>Adj.R<sup>2</sup></b>	0.070	0.080	0.134	0.039	0.113	0.110
<b>Number of observations</b>	64	64	64	64	64	64

The t statistics are reported in the parentheses.

a. Significance at 1%; b. Significance at 5%; c. Significance at 10%.

**Table 6: Religious beliefs and constitutional commitment to social security**  
**With Latin American dummy**  
 (the dependent variable- an index of constitutional commitment to social security)

	(1)	(2)	(3)	(4)	(5)	(6)
	Constitutional commitment to					
	Income Support	Unemployment	Sickness	Old Age, Disability and Survivors	Work Injury	Summary Index of Social Security
<b>Constant</b>	1.521 (1.070)	0.375 (0.290)	-0.231 (-0.230)	0.449 (0.360)	-0.301 (-0.380)	0.368 (0.380)
<b>Log GDP Per-Capita</b>	-0.066 (-0.490)	0.018 (0.140)	0.017 (0.180)	0.017 (0.140)	0.032 (0.420)	0.009 (0.100)
<b>Catholic</b>	0.001 (0.120)	0.003 (0.570)	<b>0.008<sup>b</sup></b> (2.100)	0.003 (0.650)	0.002 (0.850)	0.003 (0.910)
<b>Muslim</b>	<b>-0.009<sup>c</sup></b> (-1.700)	-0.001 (-0.250)	0.003 (0.840)	0.003 (0.640)	0.001 (-0.550)	0.0003 (0.090)
<b>Other</b>	-0.007 (-1.360)	-0.005 (-0.960)	0.001 (0.310)	-0.002 (-0.450)	0.0001 (0.04)	-0.003 (-0.690)
<b>Latin America</b>	-0.043 (-0.110)	0.496 (1.350)	0.276 (0.980)	<b>0.572<sup>c</sup></b> (1.640)	<b>0.922<sup>a</sup></b> (4.170)	<b>0.481<sup>c</sup></b> (1.790)
<b>Adj.R<sup>2</sup></b>	0.056	0.095	0.133	0.066	0.306	0.142
<b>Number of observations</b>	64	64	64	64	64	64

The t statistics are reported in the parentheses.

a. Significance at 1%; b. Significance at 5%; c. Significance at 10%.



**Table 7: A simple matrix of social security laws and constitutional rights****Panel A: Old Age, Disability and Survivors (number of countries)**

Constitutional Right	Social Security Law		Total
	Yes	No	
Yes	43	0	<b>43</b>
No	25	0	<b>25</b>
Total	<b>68</b>	<b>0</b>	<b>68</b>

**Panel B: Unemployment (number of countries)**

Constitutional Right	Social Security Law		Total
	Yes	No	
Yes	14	6*	<b>20</b>
No	33	15	<b>48</b>
Total	<b>47</b>	<b>21</b>	<b>68</b>

\* The six countries are Bolivia, Dominican Republic, Panama, Nicaragua, India and Bahrain.

**Panel C: Work Injury (number of countries)**

Constitutional Right	Social Security Law		Total
	Yes	No	
Yes	11	0	<b>11</b>
No	57	0	<b>57</b>
Total	<b>68</b>	<b>0</b>	<b>68</b>

**Panel D: Sickness (number of countries)**

Constitutional Right	Social Security Law		Total
	Yes	No	
Yes	13	2*	<b>15</b>
No	42	11	<b>53</b>
Total	<b>55</b>	<b>13</b>	<b>68</b>

\* The two countries are Syria and Bahrain.

**Table 8: Generosity of social security laws and constitutional commitment to social security**

	(1)	(2)	(3)	(4)
	Dependent variable:			
	Transfer Payment (% GDP)	Contribution Rate (All programs)	Contribution Rate (Old Age, Disability and Survivors)	Social Security Laws Index ( <i>Botero et al,</i> <i>2004</i> )
<b>Constant</b>	-2.423 (-0.340)	<b>56.870<sup>a</sup></b> (3.140)	<b>40.790<sup>a</sup></b> (3.090)	-0.312 (-1.190)
<b>Log GDP Per-Capita</b>	-0.284 (-0.310)	<b>-5.733<sup>a</sup></b> (-2.430)	<b>-4.061<sup>b</sup></b> (-2.370)	<b>0.089<sup>a</sup></b> (2.650)
<b>Population 65+</b>	<b>1.592<sup>a</sup></b> (8.780)	<b>2.159<sup>a</sup></b> (4.590)	<b>1.327<sup>a</sup></b> (3.880)	<b>0.011<sup>c</sup></b> (1.870)
<b>CCSS Summary Index</b>	<b>2.750<sup>a</sup></b> (3.330)	2.145 (1.000)		0.034 (1.330)
<b>CCSS Old age, Disability and Survivors</b>			<b>2.228<sup>c</sup></b> (1.770)	
<b>Adj.R<sup>2</sup></b>	0.758	0.261	0.204	0.489
<b>Number of Observations</b>	65	66	66	52

The t statistics are reported in the parentheses.

a. Significance at 1%; b. Significance at 5%; c. Significance at 10%.

**Table 9: Generosity of social security laws and constitutional commitment to social security**

	(1)	(2)	(3)	(4)	(5)	(6)
	The dependent variable: an index of the extent of social security laws ( <i>Botero et al, 2004</i> )					
	Unemployment	Sickness and Health	Old Age, Disability and Death	Old Age, Disability and Death	Old Age, Disability and Death	Social Security Laws Index
<b>Constant</b>	<b>0.639<sup>a</sup></b> (2.840)	-0.178 (-0.570)	-0.193 (-1.130)	0.173 (-1.020)	-0.171 (-1.010)	<b>-0.656<sup>a</sup></b> (-3.420)
<b>Log GDP Per-Capita</b>	0.014 (0.590)	<b>0.095<sup>a</sup></b> (2.820)	<b>0.087<sup>a</sup></b> (4.730)	<b>0.086<sup>a</sup></b> (4.690)	<b>0.086<sup>a</sup></b> (4.710)	<b>0.139<sup>a</sup></b> (6.680)
<b>CCSS Unemployment</b>	0.005 (0.320)					
<b>CCSS Sickness</b>		0.056 (1.360)				
<b>CCSS Old Age</b>			0.005 (0.350)			
<b>CCSS Old Age, Survivors, Disability</b>				-0.007 (-0.390)		
<b>CCSS Summary Index</b>					-0.014 (-0.610)	0.037 (1.390)
<b>Adj. R<sup>2</sup></b>	-0.043	0.121	0.285	0.286	0.289	0.463
<b>Number of Observations</b>	39	52	52	52	52	52

The t statistics are reported in the parentheses.

a. Significance at 1%; b. Significance at 5%; c. Significance at 10%.

**Table 10: Generosity of unemployment law and constitutional commitment to unemployment insurance**

	(1)	(2)	(3)	(4)	(5)
	Dependent variable: an index of the extent of unemployment law ( <i>Botero et al, 2004</i> )				
	Summary index of unemployment law	Percentage of the net salary covered by the net unemployment in case of a one-year unemployment period	Waiting period for unemployment	Percentage of the worker's monthly salary deducted by law to cover unemployment	Months of contributions or employment required to qualify for unemployment by law
<b>Constant</b>	<b>0.639<sup>a</sup></b> (2.840)	-0.255 (-0.420)	0.331 (0.610)	<b>1.575<sup>a</sup></b> (3.520)	0.359 (0.990)
<b>Log GDP Per-Capita</b>	0.014 (0.590)	0.071 (1.120)	0.059 (1.040)	<b>-0.079<sup>c</sup></b> (-1.690)	0.058 (1.540)
<b>CCSS Unemployment</b>	0.005 (0.320)	<b>0.074<sup>c</sup></b> (1.880)	-0.016 (-0.420)	0.011 (0.380)	-0.038 (1.520)
<b>Adj. R<sup>2</sup></b>	-0.043	0.064	-0.017	0.028	0.077
<b>Number of Observations</b>	39	36	39	39	39

The t statistics are reported in the parentheses.

a. Significance at 1%; b. Significance at 5%; c. Significance at 10%.

**Table 11: Generosity of social security laws and transfer payments expenditures**  
(Dependent variable - the share of transfer payments in GDP)

	(1)	(2)	(3)	(4)	(5)	(6)
<b>Constant</b>	3.114 (0.460)	-0.681 (-0.130)	-1.609 (-0.540)	-2.145 (-0.880)	<b>-3.030<sup>b</sup></b> (-2.170)	<b>-2.925<sup>b</sup></b> (-2.350)
<b>Population 65+</b>	<b><sup>a</sup>1.628</b> (7.960)	<b>1.635<sup>a</sup></b> (10.860)	<b><sup>a</sup>1.643</b> (10.880)	<b>1.680<sup>a</sup></b> (9.280)	<b>1.551<sup>a</sup></b> (11.260)	<b>1.588<sup>a</sup></b> (9.820)
<b>Unemployment Benefits</b>	-8.889 (-0.990)					
<b>Sickness and Health Benefits</b>		-4.308 (-0.680)				
<b>Old Age, Disability and Death Benefits</b>			-3.808 (-0.730)			
<b>Social Security Laws Index</b>				-3.377 (-0.700)		
<b>Sickness and maternity</b>					0.023 (0.010)	
<b>Unemployment</b>						-0.574 (-0.330)
<b>R<sup>2</sup> Adj</b>	0.622	0.718	0.727	0.727	0.718	0.719
<b>Number of Observations</b>	39	47	51	51	65	65

The t statistics are reported in the parentheses  
a. Significance at 1%; b. Significance at 5%; c. Significance at 10%.

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