Contract Intensity of National Economies (CINE) dataset, Version Dec-2025

The Contract Intensity of National Economies (CINE) dataset gauges the commercialization, or market depth, of national economies. Data are available for most countries from 1989 to 2022.

Theoretical Underpinning

Economic norms theory (Mousseau 2000; 2019) is a microfoundational theory of comparative and international politics. As summarized in Table 1, most settled societies can be classified into two types, depending on the prevailing mode of microeconomic cooperation. Market societies are contract-intensive, as the prevailing mode of cooperation is the non-self-enforcing contract. Non-self-enforcing contracts are typically enforced by a state. Where markets are weak, on the other hand, the prevailing mode of cooperation is the self-enforcing contract. Self-enforcing contracts are typically enforced by the contracting parties themselves through practices of reciprocity, without any need for a state. Societies tend toward the two modes of cooperation because, where markets are weak, market search costs are high, and where markets are robust, free agents can defect from relationships with little or no punishment (Kranton 1996).

In economic norms theory, these divergent microeconomic norms generate divergent microfoundational interests. In market societies, rational actors are comparatively more likely to value the existence of a state that enforces contracts reliably, impartially, and efficiently, because material sustenance depends on the existence of such a state (Mousseau 2000). Where markets are weak, rational actors are comparatively more likely to value the strength of their relationships and group ties, because material sustenance depends on the strength of relationships (Mousseau 2002). These varying microeconomic norms and the resulting interests shape societal values. In market societies, there are robust societal consensuses on the value of democracy and economic growth, as democracy and press freedom are the best-known means of constraining a state toward enforcing contracts, and economic growth for anyone in a market enhances opportunities for everyone engaging in it (Mousseau and Mousseau 2023). Where markets are weak, on the other hand, cooperation between strangers is less frequent, making group ties and relationships relatively more important. As a result, at the state level, societies with weak markets often lack stable consensuses of any kind. This can explain why societies with weak markets are often burdened with civil conflict, including ideological and identity issues (Mousseau 2012).

Table 1. Economic Norms Theory

	Market Societies	Non-market Societies
Mode of microfoundational cooperation	Non-self-enforcing contracts	Self-enforcing contracts
Cooperation enforcement mechanism	The state	Reciprocity
Microfoundational strategic value	A state that enforces contracts reliably, impartially, and efficiently	Relationships and group ties
Societal consensuses	Democracy and economic growth	None
State foreign policy interests	Status quo and the principle of the sovereign right of self-determination	Diversionary motives and revisionist goals

These divergent domestic values, in turn, give rise to divergent foreign policy interests. In market societies, the consensus on economic growth leads leaders of these states, constrained by democratic institutions, to consistently prioritize the status quo in global politics and the principle of the sovereign right to self-determination, as these are the best-known strategies for long-term economic growth. Where markets are weak, leaders are incentivized to pursue revisionist foreign policy goals to divert attention from domestic challenges and divisions and to enhance the state's legitimacy. Alas, there is an inherent clash between states with market societies and other states: market-oriented states universally favor the status quo and are naturally allied to defend it, forming a spontaneous global hegemony, whereas states with weak markets often harbor revisionist ambitions, even as many of these states ally with the market hegemony to protect themselves from other revisionist states (Mousseau 2019). CINE version Dec-2025 provides two measures of a contract-intensive economy: non-self-enforcing contracts per capita in the form of life insurance contracting, and currency turnover rates.

Life Insurance Density (LID)

The life insurance contract is the epitome of the non-self-enforcing contract, because policyholders must rely on the state to enforce it after death. The World Bank Financial Structure Database (Beck, Demirgüç-Kunt, and Levine 2000; Cihak et al. 2012) has been updated, now yielding data points for 68.2% of all state-years from 1989 to 2020. These data are provided as life insurance *Penetration*, which is life insurance premiums in force as a percentage of GDP. They are converted in the CINE data to life insurance *Density*, or gross domestic life insurance contracting per capita, as follows:

Life Insurance Density (LID) = asinh((Penetration/100)*GDP/Population)

Density is a better theoretical fit than Penetration because the measure is intended to gauge microeconomic norms. The inverse hyperbolic sine is calculated to smooth out extreme values. The World Bank measures of GDP (World Bank 2023) and Population (World Bank Open Data, n.d.) are provided in the CINE dataset to facilitate the direct replication of the measure from World Bank sources.[1]

Hard Currency State (HCS)

Deferred payments in non-simultaneous contracts are typically expressed in currencies. Therefore, rational free agents in market societies have robust interests in their states maintaining the currency's value within predictable boundaries, just as they have interests in their states enforcing contracts. In other societies, by contrast, there is less interest in a stable currency because non-simultaneous, non-self-enforcing contracts are less frequent. When they do occur, they are often managed with barter or denominated in a foreign hard currency.

Trust in a currency is gauged by investor demand for it, which reflects confidence in its sustained value. Data on currency turnover rates were obtained from the Bank for International Settlements (BIS Triennial Central Bank Survey 2023, 12) (in billions US$). Data are available from 1989 to 2022. Because the BIS methodology has changed over time, each state's share of global turnover was divided by its share of the global population for each year. The fitting

[1] Prior versions of the CINE measure of life insurance contracts have been criticized for having extensive missing values (> 65%), and the various ways these have been estimated (Dafoe et al. 2013; c.f. Mousseau 2018). The revised World Bank data now cover 68.2% of all data points with non-missing GDP and Population data from 1990 to 2020. As a result, missing datapoints are no longer estimated. (Data for GDP for South Korea, Taiwan, and Venezuela, missing from the World Bank dataset, were obtained from the Maddison measure provided in the V-Dem dataset, version 12 (Coppedge et al. 2022). Data on population for Taiwan, also missing from the World Bank data, were also obtained from the V-Dem dataset.)

denominator is population, because the measure is intended to gauge microeconomic norms. The value 1 emerges as a natural breakpoint: as global demand is finite, values greater than 1 indicate that investors are more likely to retain the currency as a store of value than values less than 1. In a hypothetical world in which all states have contract-intensive economies, every state's currency turnover ratio would be 1. Thus, values of 1 or higher indicate a *Hard Currency State.* For currencies in the data with values less than one, values less than 0.75 were set to 0. As a precaution, borderline values between 0.75 and 1 are treated as missing (a total of 20 datapoints, including 13 countries). The binary nature of the measure facilitates the assumption that states never in the data have values of 0, since the BIS records all currencies traded in foreign exchange markets. Data are available for 88.1% of data points from 1989 through 2022. Hard Currency States are listed in Table 2.[2]

Table 2. Hard Currency States, 1989-2022

State Name	*Start Year*	*State Name*	*Start Year*
Australia	-1989	United States	-1989
Belgium	-1989	France	1992
Canada	-1989	New Zealand	1992
Denmark	-1989	Austria	1995
Finland	-1989	Ireland	1998
Germany	-1989	Hungary	2007
Japan	-1989	Korea, Rep.	2007
Netherlands	-1989	Czech Republic	2013
Norway	-1989	Israel	2013
Singapore	-1989	Taiwan	2016
Sweden	-1989	United Arab Emirates	2019
Switzerland	-1989	Bahrain	2022
United Kingdom	-1989		

[2] The BIS data are published every three years. In-between values were interpolated. For eurozone countries, those with hard currencies (HCS = 1) at the start of the euro in 1999 were set as having hard currencies after this year (Belgium, France, Germany, Ireland, and the Netherlands). All other eurozone countries were retained as missing.

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