The Measure of Power

State Ownership, Class Rule, and the Critique of Inequality

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Abstract

This paper develops a theory and measure of class power in the modern capitalist world. It begins from the division between bourgeoisie and proletariat and derives class rule from ownership of Contour A, the commanding contour that directs credit, energy, infrastructure, resources, transport, strategic industry, and external economic movement. On this basis, the paper reconstructs the concept of inequality by distinguishing personal inequality, apparent inequality, Pure Real Inequality, and real inequality. This distinction challenges the usual treatment of inequality as a single distributional measure and shows that inequality also has a class-structural form. The empirical analysis measures personal inequality through consumption-based Gini coefficients, apparent inequality through top wealth shares, and Pure Real Inequality through a gated public-capital proxy. Public capital becomes state-proletarian property when it passes the Contour A Gate, meaning that it is connected to state control over the commanding structure of the economy. The results show a clear separation between public capital inside ordinary capitalist systems and public capital embedded in Contour A control. The paper therefore provides a framework for measuring inequality, public capital, and class rule within one unified structure.

Keywords: state ownership; class power; inequality measurement; commanding contour; proletarian ownership; bourgeois rule; anticapital; polar marxism; Marxism
JEL Codes: P16, P26, D31, D63, H11

1 Introduction

Modern inequality measurement usually counts income, consumption, wealth, and private wealth concentration. These measures are useful. They show how income is distributed, how households consume, how wealth is concentrated, and how much of total wealth is held by the top 10 percent or the top 1 percent. They make visible important differences in living standards and property ownership across people, groups, countries, and historical periods.

These measures do not by themselves show which class owns the commanding structure of the economy. A country can have high personal inequality while bourgeois power is structurally suppressed in commanding and productive property. A country can also have lower personal inequality while bourgeois rule remains intact. Personal inequality and class power therefore require separate measurement. The level of inequality between individuals is one question. The class form of ownership over the structure that directs the economy is another.

This paper develops a framework for measuring that distinction. The analysis proceeds from the basic economic polarity of the modern capitalist world: bourgeoisie and proletariat. The bourgeoisie is the class of owners of capital and the means of production. The proletariat is the class of workers who

do not individually own the means of production and who sell labour-power. Other groups, strata, professions, managers, bureaucrats, and administrative agents may exist and act within the economic system, but they are non-basic in relation to these two classes. The ruling economic class is the class whose interests are expressed and reproduced by the economic system as a whole.

From this starting point, class rule can take two basic forms: bourgeois rule or proletarian rule. One sovereign economic system expresses one ruling economic class. The central theoretical task is therefore to identify where the direction of the economic system is determined and which class owns that directing structure.

The contribution of the paper is threefold. First, it develops a theory of class power that locates class rule in ownership of the commanding contour and clarifies proletarian power as collective ownership of that contour. Second, it reconstructs inequality conceptually by distinguishing personal inequality, apparent inequality, Pure Real Inequality, and real inequality as different objects rather than variants of one measure. Third, it translates this framework into a concrete method by introducing the Contour A Gate and representing real inequality as a vector rather than a single scalar measure.

The paper proceeds as follows. Section 2 reviews the literatures on inequality measurement, wealth concentration, state ownership, Marxist class theory, and strategic sectors, and closes with Section 3 on why the modern capitalist world is structured around two basic classes. Section 4 develops the theoretical foundations of class power, economic contours, ownership, and state-proletarian property. Section 5 defines the forms of inequality and explains why personal inequality, apparent inequality, Pure Real Inequality, and real inequality measure different objects. Sections 6 and 7 measure these forms empirically, apply the Contour A Gate, extend the analysis to a wider sample, introduce Global North controls, represent real inequality as a vector, and report robustness checks. Section 8 summarizes the theoretical and empirical results and identifies future directions for measurement.

2 Literature Review

This paper stands at the intersection of several literatures: inequality measurement, wealth concentration, state ownership, Marxist class theory, and the study of strategic sectors. These literatures provide necessary empirical and theoretical materials, but they usually remain separated. The central gap addressed here is that existing work measures distributional inequality, private wealth concentration, or state economic activity, but rarely connects these objects to the class form of ownership over the commanding structures of the economy.

The present paper uses these literatures selectively. It accepts the empirical usefulness of standard inequality measurement, wealth-share data, public-capital data, and state-ownership research. It also accepts the classical Marxist distinction between bourgeoisie and proletariat as the basic class abstraction for the modern capitalist world. Its contribution is to connect these materials through the concept of Contour A and to ask when public capital can be counted as state-proletarian property.

2.1 Inequality Measurement

The modern literature on inequality measurement has developed powerful tools for studying the distribution of income, consumption, and wealth. Standard measures such as the Gini coefficient, income shares, consumption-based inequality measures, and top-income shares allow researchers to

compare inequality across countries and over time. This literature is central to the empirical study of personal inequality.

Atkinson's work helped establish inequality as a central object of welfare economics and public policy, with attention to measurement, distribution, and institutional remedies (Atkinson 2015). Piketty's work placed long-run capital accumulation and the distribution of income and wealth at the centre of modern political economy (Piketty 2014). Milanović extended the analysis to global inequality and the relation between national and global distributions (Milanovi'c 2016). Saez and Zucman developed influential estimates of wealth concentration using capitalized income tax data, especially for the United States (Saez and Zucman 2016). The World Inequality Database continues this empirical tradition by constructing long-run distributional series for income and wealth through Distributional National Accounts and related methods (World Inequality Database 2026).

International data providers also make this literature operational. The World Bank Poverty and Inequality Platform provides country-level poverty and inequality indicators based on household survey data and allows access through programmatic tools such as the PIP API and the `pipr` package (World Bank 2026b). Our World in Data makes top wealth share indicators accessible in a standardized format, based on the World Inequality Database (Our World in Data 2026a,b; World Inequality Database 2026).

For the purposes of this paper, this literature is necessary but incomplete. It measures inequality between individuals or households. It can show how income, consumption, and wealth are distributed across persons, percentiles, or groups. It can therefore support the measurement of personal inequality. It can also support the critique of apparent inequality, because apparent inequality is usually constructed from visible private wealth and household wealth.

However, standard inequality measurement does not answer the question of which class owns the commanding structures of the economy. They capture distributional inequality, but not the class form of ownership over the commanding structures of the economy.

2.2 State Ownership and State Capitalism

A separate literature studies state ownership, state-owned enterprises, public capital, state capitalism, sovereign wealth funds, development banks, national champions, and strategic public enterprises. This literature provides the institutional vocabulary needed to study the state as an economic owner and coordinator.

The OECD Guidelines on Corporate Governance of State-Owned Enterprises define and standardize many issues concerning state ownership, state control, ownership entities, disclosure, transparency, governance, and the state's role as owner (OECD 2024b). Musacchio and Lazzarini analyze modern state capitalism as a set of forms in which the state acts as owner, majority shareholder, minority shareholder, financial backer, or supporter of national champions (Musacchio and Lazzarini 2014). Chang's work on state-owned enterprise reform also shows that SOEs must be studied institutionally rather than reduced to a simple public/private contrast (Chang 2007). The IMF Investment and Capital Stock Dataset and the DBnomics IMF/PGCS data provide the public and private capital stock data needed to measure public capital quantitatively (DBnomics 2026; International Monetary Fund 2026).

This literature is useful because it shows that the state is not external to the economy. The state can own enterprises, allocate credit, hold equity, direct development banks, control infrastructure,

operate sovereign wealth funds, and structure strategic sectors. In this sense, the state-ownership literature provides crucial evidence for the empirical side of this paper.

The limitation is that this literature often treats state ownership as a general institutional category. It studies SOEs, public firms, state shareholding, corporate governance, or state capitalism, but it does not always distinguish ordinary public ownership from ownership of the commanding contour. A state-owned firm in an ordinary productive sector and state control over the national credit system do not have the same structural meaning. A municipal public utility and a state-controlled national energy grid do not occupy the same position in the direction of the economy.

For the present paper, public capital is not automatically state-proletarian property. SOEs are not automatically Contour A. State ownership outside the commanding contour does not determine class rule. The literature on state capitalism identifies state economic activity, but it often lacks a class criterion separating ordinary public ownership from state ownership of the commanding contour.

A further literature studies strategic sectors, development states, infrastructure, credit allocation, industrial policy, financial sovereignty, energy systems, transport networks, and monetary authority. This literature often recognizes that some sectors play a special role in directing the economy.

Developmental-state scholarship shows the importance of state capacity, industrial policy, planning agencies, and strategic coordination in late development. Johnson's study of MITI and Japanese industrial policy is a classic example (Johnson 1982). Amsden, Wade, and Evans similarly analyze state coordination, industrial upgrading, embedded autonomy, and the institutional conditions of developmental transformation (Amsden 1989; Evans 1995; Wade 1990). Work on state capitalism and national champions also emphasizes the role of development banks, resource companies, and strategic sectors in state-led economic organization (Chang 2007; Musacchio and Lazzarini 2014). Literature on public investment and capital stock data provides the quantitative basis for separating public and private capital (DBnomics 2026; International Monetary Fund 2026).

This literature is important because it recognizes that banks, energy systems, infrastructure, transport, raw materials, telecom networks, and strategic industry are not ordinary sectors. They condition the movement of the whole economy. Credit determines investment. Energy determines production capacity. Transport determines circulation. Ports and railways determine logistics. Telecom and digital infrastructure determine coordination. Monetary authority and external finance determine the relation between the domestic economy and the world market.

The present paper unifies these elements under the concept of Contour A: the commanding contour of the economy. Existing literature often discusses these sectors separately. This paper treats them as a single functional structure and uses them as a gate for measuring Pure Real Inequality. Public capital is counted only when it is connected to state control over this commanding contour.

2.3 Marxist Class Theory

The theoretical foundation of this paper is the classical Marxist distinction between bourgeoisie and proletariat. Marx defines capitalist society through the relation between capital and labour, ownership of the means of production, labour-power, surplus appropriation, and class rule (Marx 1976; Marx and Engels 1848). The bourgeoisie owns capital and the means of production. The proletariat sells labour-power and does not individually own the means of production. This basic class relation structures the capitalist mode of production.

This paper adopts the two-class structure of modern capitalist society as the basic abstraction. Other groups, strata, professions, managers, bureaucrats, and administrative agents may exist and may exercise influence, but they do not constitute a third basic economic class in the framework used here.

The Marxist literature provides the central theoretical question: which class rules? Standard inequality measurement asks how income, consumption, or wealth are distributed. Marxist class theory asks which class owns and directs the means of production and the social surplus. The present paper extends this question into a measurement framework. It asks how the class form of property changes the meaning of inequality indicators.

The paper therefore uses Marxist class theory as the organizing logic of measurement.

2.4 Gap and Contribution

The gap in the literature can be stated directly. Existing work usually does one of two things. First, it measures inequality between individuals or households. Second, it studies state ownership, public enterprises, or state capitalism institutionally.

Each of these approaches is useful. Inequality measurement captures distributional outcomes. State-ownership literature captures the institutional activity of the state as owner, shareholder, investor, or coordinator. But these approaches usually do not ask whether state ownership of the commanding contour changes the class meaning of inequality measurement.

This paper addresses that gap by introducing a distinction between personal inequality, apparent inequality, pure real inequality, and real inequality.

The key methodological contribution is the Contour A gate. The gate prevents public capital from being counted mechanically. Public capital is counted as state-proletarian property only when the state controls the commanding contour of the economy. This creates a bridge between inequality measurement, state ownership, and class theory.

The paper therefore contributes in four ways. First, it distinguishes personal inequality, apparent inequality, pure real inequality, and real inequality. Second, it defines Contour A as the commanding contour of the economy. Third, it introduces the Contour A gate as a reproducible rule for deciding when public capital can be counted as state-proletarian property. Fourth, it represents real inequality as a vector rather than a single scalar measure.

The result is a supplementation of existing inequality measurement. Standard measures remain useful for measuring personal inequality and apparent inequality. The present paper adds the missing structural question: whether the commanding contour of the economy is owned and directed in a way that changes the class meaning of public capital and inequality.

A further contribution follows from the same argument. In order to derive the framework, the paper also clarifies the problem of proletarian rule in logical form. It shows that proletarian power must be understood through collective ownership of the commanding contour, not through bureaucratic status, the loose formula of state capitalism, or a purely distributional idea of equality and inequality. In this way, the paper also rejects a range of Western narratives that obscure the class question by dissolving it into bureaucracy, state management, or ordinary inequality measurement.

3 Why the Two-Class Axiom

The theoretical foundation of this paper is the division of the modern capitalist world into two basic economic classes: the bourgeoisie and the proletariat. Other classes and intermediate strata certainly exist, including professionals, managers, bureaucrats, small proprietors, and other intermediate positions. But the claim here is more precise: the question is whether there are two basic economic classes in the modern capitalist world. The answer given here is yes: the two basic economic classes are the bourgeoisie and the proletariat.

The classical formulation of this position is given by Marx and Engels. Modern bourgeois society simplifies the basic class antagonism into two great opposed camps: bourgeoisie and proletariat. The bourgeoisie is the class of owners of capital and the means of production. The proletariat is the class of workers who do not individually own the means of production and who sell labour-power. The basic class division is therefore a property relation. It concerns the relation of social groups to capital, labour, production, and appropriation. (Marx 1976; Marx and Engels 1848)

This property basis is also central in formal Marxist treatments of class and exploitation. Roemer's analytical work places class and exploitation in relation to differential ownership of productive assets. This confirms the same basic point from a formal direction: class position is rooted in ownership and non-ownership of productive assets. The central division is between those who control productive assets and those whose reproduction depends on labour-power. (Devine and Dymski 1991; Roemer 1982)

The two-class axiom used in this paper follows from this line. Other groups exist inside the movement between these poles, but they do not form a third basic class. They are derivative, intermediate, administrative, professional, petty-proprietary, or transitional in relation to the basic opposition between capital and labour.

This theoretical division also receives mathematical and empirical confirmation from the literature on income and wealth distributions. A repeated result in this literature is that capitalist distributions separate into two qualitatively different regimes. The mass of the population follows an exponential, Boltzmann-Gibbs, or lognormal-type distribution. The upper tail follows a Pareto or power-law distribution. This is a two-regime structure.

Drăgulescu and Yakovenko show that wealth and income distributions in the United Kingdom and the United States contain two different parts: the great majority of the population is described by an exponential distribution, while the high-end tail follows a power law. (Drăgulescu and Yakovenko 2001) Silva and Yakovenko state the result directly as a two-class structure of personal income distribution in the United States. In their analysis of IRS data for 1983–2001, the lower class, comprising roughly 97–99 percent of the population, follows an exponential law, while the upper class, roughly 1–3 percent of the population, follows a Pareto power law. (Silva and Yakovenko 2005b)

Yakovenko and Rosser summarize this result in the econophysics literature as a two-class distribution of wealth and income. The lower class is characterized by an exponential, thermal distribution. The upper class is characterized by a power-law, superthermal distribution. The lower part is stable and stationary, while the upper part is dynamic and tied to capital-market movement. (Yakovenko and Rosser 2009) Silva and Yakovenko also trace the temporal movement of the thermal and superthermal income classes in the United States, while Nirei and Souma model the same division through labour and asset income dynamics. (Nirei and Souma 2007; Silva and Yakovenko 2005a)

The same structure appears in other empirical work. Clementi and Gallegati find that income distributions in Germany, the United Kingdom, and the United States are consistent with a lognormal function for the low-middle income group, covering about 97–99 percent of the population, and with a Pareto or power-law function for the high-income group, covering about 1–3 percent of the population. (Clementi and Gallegati 2005) Tao reaches the same kind of result through an extension of Gibrat's law: for typical market-economy countries, the bottom 90 percent of the population is approximated by an exponential distribution, while the richest 1–3 percent is approximated by an asymptotic power law. (Tao 2024)

These results confirm the Marxist class line in statistical form. The mass distribution corresponds to the labour-income regime. The upper Pareto tail corresponds to the capital-income regime, where asset ownership, business income, accumulation, and capital gains dominate. The mathematical split between the exponential or lognormal body and the Pareto tail is therefore the statistical expression of the same basic class division formulated theoretically by Marx: the division between labour and capital.

The theory of class and the mathematics of distribution therefore point to the same structure: modern capitalist society is organized around the opposition between a mass labour regime and an upper capital regime.

The rest of the paper builds on this axiom.

4 Theoretical Foundations of Class Power

4.1 Economic Classes

Definition 1 (Economic System)**.** An economic system is the unity of a country, its economy, and its state, insofar as they form a single structure through which class interests are expressed and reproduced.

Definition 2 (Economic Class)**.** An economic class is a social group defined by its position in production, ownership, labour, and the appropriation of the social product.

Definition 3 (Ruling Economic Class)**.** A ruling economic class is an economic class whose interests are expressed and reproduced by the economic system as a whole.

Assumption 1 (Two Basic Economic Classes)**.** In the modern capitalist world, there are two basic economic classes: the bourgeoisie and the proletariat.

In its primary classical definition, the bourgeoisie is the class of owners of capital and the means of production.

In its primary classical definition, the proletariat is the class of workers who do not individually own the means of production and who sell their labour-power.

Remark 1 (Primary Definitions). The primary definitions of the bourgeoisie and the proletariat do not exhaust all properties of these classes. They establish the initial economic distinction from which the further theory proceeds.

Corollary 1 (Non-basic Classes and Strata)**.** *Since the bourgeoisie and the proletariat are the two basic economic classes of the modern capitalist world, all other classes, groups, and strata are non-basic in relation to them.*

Such groups may exist, possess interests, influence politics, and participate in economic life, but they do not constitute a third basic economic class.

4.2 Class Rule

Assumption 2 (Unity of the Ruling Economic Class)**.** In one economic system, only one basic economic class can be the ruling economic class.

The ruling economic class is the class whose interests are expressed and reproduced by the economic system as a whole.

Theorem 1 (Two Forms of Class Rule)**.** *In the modern economic system, class rule can take only two basic forms: bourgeois rule or proletarian rule.*

Proof. By the assumption of two basic economic classes, the modern capitalist world contains two basic economic classes: the bourgeoisie and the proletariat. By the corollary on non-basic classes and strata, no third basic economic class exists. By the assumption of the unity of the ruling economic class, only one basic economic class can be the ruling economic class in one economic system. Therefore, the ruling economic class can only be either the bourgeoisie or the proletariat. Hence, class rule can take only two basic forms: bourgeois rule or proletarian rule. □

Corollary 2 (Criterion of Non-bourgeois Rule)**.** *If an economic system is sovereign and does not express bourgeois rule, then it expresses proletarian rule.*

Proof. By the theorem on the two forms of class rule, class rule can only be bourgeois or proletarian. If bourgeois rule is absent, and if the economic system is sovereign rather than externally nullified, then the remaining possible form of class rule is proletarian rule. □

4.3 Sovereignty and Realized Class Power

Definition 4 (Sovereignty)**.** Sovereignty is the degree to which an economic system realizes class rule through its own country, economy, and state.

Definition 5 (Vector of Class Power)**.** The realized class power of an economic system is represented by the vector

$$V = (B, P), \tag{4.1}$$

where B denotes bourgeois power and P denotes proletarian power.

Definition 6 (Values of Class Power)**.** Each coordinate of the vector of class power can take one of three values:

$$B, P \in \{0, 1, 2\}. \tag{4.2}$$

The value 0 denotes the absence of realized internal class power. The value 1 denotes relative sovereign class power. The value 2 denotes absolute sovereign class power.

Assumption 3 (Mutual Exclusivity of Class Power)**.** Bourgeois power and proletarian power cannot be positive at the same time:

$$B \cdot P = 0. \tag{4.3}$$

Proposition 1 (Admissible States of Class Power)**.** *The admissible states of realized class power are*

$$(2,0), \quad (1,0), \quad (0,2), \quad (0,1), \quad (0,0). \tag{4.4}$$

Proof. By definition, each coordinate of $V = (B, P)$ belongs to the set $\{0, 1, 2\}$. By the assumption of mutual exclusivity, B and P cannot both be positive. Therefore, the only admissible states are those in which bourgeois power is positive and proletarian power is zero, proletarian power is positive and bourgeois power is zero, or both coordinates are zero. Hence, the admissible states are $(2, 0)$, $(1, 0)$, $(0, 2)$, $(0, 1)$, and $(0, 0)$. □

Remark 2 (Non-sovereignty). The state $(0, 0)$ denotes non-sovereignty. It does not constitute a third form of class rule. It denotes the absence of realized internal class power.

Corollary 3 (Sovereign Negation Rule)**.** *If an economic system is sovereign, then the absence of bourgeois power implies proletarian power, and the absence of proletarian power implies bourgeois power.*

Formally, if $V = (B, P) \neq (0, 0)$*, then*

$$B = 0 \Rightarrow P > 0, \tag{4.5}$$

and

$$P = 0 \Rightarrow B > 0. \tag{4.6}$$

Proof. By the proposition on admissible states of class power, the only sovereign states are $(2, 0)$, $(1, 0)$, $(0, 2)$, and $(0, 1)$. In the first two states, bourgeois power is positive and proletarian power is zero. In the latter two states, proletarian power is positive and bourgeois power is zero. Therefore, under sovereignty, the absence of one form of class power implies the presence of the other. □

4.4 Economic Contours

Definition 7 (Economic Contour)**.** An economic contour is a functional domain of an economic system, defined by the role it performs in the reproduction and movement of the economy as a whole.

A contour is determined by the function it performs within the economic system.

Definition 8 (Contour A)**.** Contour A is the commanding contour of the economy.

Contour A determines the direction of movement of the economic system as a whole.

Contour A includes the economic nodes through which the general direction of production, investment, credit, infrastructure, raw materials, energy, land, transport, strategic industry, and external economic movement is determined.

Contour A directs the economy.

Definition 9 (Contour B)**.** Contour B is the productive-executive contour of the economy.

Contour B carries out production, distribution, exchange, and the execution of economic tasks within the direction determined by Contour A.

Contour B may take different forms: state, private, mixed, market, non-market, cooperative, or other forms.

The essence of Contour B is that it produces and acts within the direction determined by Contour A.

Corollary 4 (Dependence of Contour B on Contour A)**.** *Contour A determines the direction of Contour B.*

Contour B depends on Contour A.

Contour B is not independent in relation to Contour A, because it acts within the direction determined by the commanding contour.

Remark 3 (Formula of the Contours). Contour A directs. Contour B produces.

4.5 The Commanding Contour and Class Rule

Definition 10 (Ownership of Contour A)**.** Ownership of Contour A means either full ownership of Contour A or decisive ownership of Contour A.

Full ownership of Contour A means ownership of Contour A as a whole.

Decisive ownership of Contour A means ownership of a substantial part of Contour A or of its decisive nodes.

The decisive nodes of Contour A are those nodes through which the direction of the economic system is effectively determined.

Proposition 2 (Necessary Condition of Absolute Proletarian Power)**.** *Absolute proletarian power requires full proletarian ownership of Contour A.*

If $V = (0, 2)$, then the proletariat has full ownership of Contour A.

Proof. The value 2 denotes absolute sovereign class power. Absolute class power requires complete command over the direction of the economic system. Since the direction of the economic system is determined by Contour A, absolute proletarian power requires full proletarian ownership of Contour A. □

Remark 4 (Ownership and Sovereignty). Full ownership of Contour A is a necessary condition of absolute class power, but it is not by itself a sufficient condition. Absolute class power also requires absolute sovereignty. Therefore, full proletarian ownership of Contour A may correspond to relative proletarian power if the economic system possesses only relative sovereignty.

Corollary 5 (Contour A and Class Power)**.** *Let A_B denote bourgeois ownership of Contour A, and let A_P denote proletarian ownership of Contour A. Under sovereignty,*

$$A_B \Rightarrow B > 0, \tag{4.7}$$

and

$$\neg A_B \Rightarrow P > 0. \tag{4.8}$$

Equivalently, under sovereignty, the absence of bourgeois ownership of the commanding contour implies proletarian class power.

Proposition 3 (Bourgeois Ownership of Contour A)**.** *If the bourgeoisie owns Contour A, its substantial part, or its decisive nodes, then the economic system expresses bourgeois rule.*

Proof. Contour A determines the direction of the economic system as a whole. The ruling economic class is the class whose interests are expressed and reproduced by the economic system as a whole.

Therefore, if the bourgeoisie owns Contour A, its substantial part, or its decisive nodes, the direction of the economic system is determined through bourgeois ownership. Hence, the economic system expresses bourgeois rule. □

Corollary 6 (Exclusion of Proletarian Rule)**.** *If the bourgeoisie owns Contour A, its substantial part, or its decisive nodes, then proletarian rule is absent.*

Proof. By the assumption of mutual exclusivity of class power, bourgeois power and proletarian power cannot be positive at the same time. Since bourgeois ownership of Contour A expresses bourgeois rule, proletarian rule is absent. □

Theorem 2 (Non-bourgeois Ownership of Contour A)**.** *If an economic system is sovereign and the bourgeoisie does not own Contour A, its substantial part, or its decisive nodes, then Contour A belongs to the proletariat.*

Proof. If the bourgeoisie does not own Contour A, its substantial part, or its decisive nodes, then bourgeois rule over the commanding contour is absent. Since the economic system is sovereign, its realized class power is not $(0, 0)$. By the sovereign negation rule, the absence of bourgeois power under sovereignty implies proletarian power. Therefore, Contour A belongs to the proletariat. □

Corollary 7 (Proletarian Direction of Contour B)**.** *If Contour A belongs to the proletariat, then Contour B acts within the direction determined by proletarian rule.*

Proof. By the dependence of Contour B on Contour A, Contour B acts within the direction determined by Contour A. If Contour A belongs to the proletariat, then the direction of Contour B is determined through proletarian rule. □

Theorem 3 (Necessity of Contour A for Proletarian Rule)**.** *Proletarian rule requires proletarian ownership of Contour A, its substantial part, or its decisive nodes.*

Proof. Proletarian rule means that the economic system expresses and reproduces proletarian interests as a whole. The direction of the economic system as a whole is determined by Contour A. Therefore, proletarian rule requires proletarian ownership of Contour A, its substantial part, or its decisive nodes. □

4.6 Property and Proletarian Ownership

Definition 11 (Ownership)**.** Ownership is the social relation through which a subject possesses, controls, and disposes of property.

Definition 12 (Individual Ownership)**.** Individual ownership is ownership exercised by a separate person, firm, or private owner.

Definition 13 (Collective Ownership)**.** Collective ownership is ownership exercised by a class as a whole through a common social form.

Remark 5 (Quasi-collective Ownership). Collective ownership must be distinguished from quasi-collective ownership.

Quasi-collective ownership exists when several individuals own separate individual shares of the same property. In this case, each individual owns a transferable part of the property rather than the property as a whole.

Such ownership remains a form of individual ownership, because the owner relates to the property through a private, separable, and transferable title.

Collective ownership, in the strict sense used here, means ownership of the property as a whole by a class as a whole through a common social form.

Definition 14 (Personal Property)**.** Personal property consists of the means of individual life and consumption: income used for living, personal savings, residential housing, household goods, and other non-productive assets that do not constitute capital, business assets, or means of production.

Definition 15 (Bourgeois Property)**.** Bourgeois property is private property in capital and the means of production. It gives the bourgeoisie the ability to appropriate surplus, organize production for profit, and exercise power over labour.

Theorem 4 (Impossibility of Individual Proletarian Ownership of Productive Capital)**.** *Proletarian ownership of productive capital or of the means of production as business assets cannot be individual. It can only be collective.*

Proof. In its primary classical definition, the proletariat is the class of workers who do not individually own the means of production and who sell their labour-power. Individual ownership of productive capital places the owner in the position of a private owner in relation to that capital. A worker who individually owns productive capital therefore does not stand in a proletarian relation to that capital. Hence, individual ownership of productive capital cannot be proletarian ownership. If the proletariat owns productive capital, it can do so only collectively. □

Corollary 8 (Collective Form of Proletarian Property)**.** *Proletarian property in productive capital must take a collective form.*

Proof. By the impossibility of individual proletarian ownership of productive capital, proletarian ownership of productive capital cannot be individual. Therefore, its only possible form is collective ownership. □

Definition 16 (State-Proletarian Property)**.** State-proletarian property is state ownership of Contour A, its substantial part, or its decisive nodes, insofar as this ownership removes the commanding contour from bourgeois ownership and constitutes a collective form of proletarian ownership through the state.

4.7 Clarifications

1. **Does state ownership always mean proletarian ownership?**

   State ownership becomes state-proletarian ownership when it concerns Contour A, its substantial part, or its decisive nodes. State ownership outside the commanding contour does not by itself determine the class character of the economic system.

2. **Can markets exist under proletarian rule?**

   Markets can exist inside Contour B. The existence of markets does not determine class rule. Class rule is determined by ownership of Contour A.

3. **Can rich individuals exist under proletarian rule?**

   Rich individuals can exist under proletarian rule. Their existence indicates personal inequality, but class rule is determined by ownership of the commanding contour.

4. **Can private capital exist without ruling?**

   Private capital can exist without being the ruling class. It becomes ruling only when it owns Contour A, its substantial part, or its decisive nodes.

5. **Is bureaucracy a third ruling class?**

   Bureaucracy is an administrative agent, not a third basic economic class. The basic class character of an economic system is determined by the relation between the bourgeoisie and the proletariat.

6. **Do managers, bureaucrats, or politicians become a ruling class by exercising control?**

   Managers, bureaucrats, and politicians may administer property, make decisions, and abuse their position. This does not by itself make them a basic economic class or the owners of the economic system.

   In a private corporation, managers may exercise control without becoming the bourgeoisie as a class. In a state-owned system, bureaucrats may exercise control without becoming a separate ruling class.

   Such cases express a principal-agent problem. They are distortions in the administration of property, not proof of a new basic economic class.

7. **Why does ownership of Contour A matter more than ownership of ordinary firms?**

   Contour A determines the direction of the economic system as a whole. Ordinary firms operate within the direction determined by the commanding contour.

8. **Can Contour B be state-owned while the system remains bourgeois?**

   Contour B can be state-owned while the system remains bourgeois if Contour A belongs to the bourgeoisie. The class character of the system is determined by the commanding contour.

9. **Can Contour A be partly private while the system remains non-bourgeois?**

   Contour A can contain private elements while the system remains non-bourgeois, provided that the bourgeoisie does not own its substantial part or decisive nodes.

10. **Does proletarian rule mean equality of personal consumption?**

    Proletarian rule means collective command over the economic system through Contour A. It does not mean automatic equality of personal consumption.

5 Inequality and the Measure of Power

5.1 Forms of Inequality

The problem with the modern measurement of inequality is that it usually measures inequality without accounting for the class form of property. It counts income, wealth, and consumption between individuals and households, but it does not ask which class owns the commanding structures of the economy.

The previous section established that proletarian ownership of productive capital cannot be individual. It can only be collective. It also established that state-proletarian property is the state form of collective proletarian ownership when the state owns Contour A, its substantial part, or its decisive nodes.

Therefore, a measure of inequality that ignores state-proletarian property ignores a decisive form of proletarian ownership. It may show that some individuals are richer than others, but it cannot show by itself which class rules the economic system.

Given these results, inequality must be divided into different forms. The same word cannot be used for every unequal relation in the economy. Personal inequality, class-economic inequality, and real inequality describe different objects.

Definition 17 (Personal Inequality)**.** Personal inequality is inequality between individuals or households in income, consumption, savings, housing, and other forms of personal property.

Definition 18 (Apparent Inequality)**.** Apparent inequality is inequality measured by counting personal property and bourgeois property while excluding state-proletarian property.

It shows the inequality that appears when bourgeois property is counted, but collective proletarian property is not.

Definition 19 (Real Inequality)**.** Real inequality is inequality measured by counting both bourgeois property and state-proletarian property.

It includes state-proletarian property as a form of collective proletarian ownership and therefore measures the real relation between the bourgeoisie and the proletariat.

Definition 20 (Pure Real Inequality)**.** Pure real inequality is real inequality measured only through productive class property.

It compares bourgeois property in productive capital with state-proletarian property in productive and commanding property. State-proletarian property includes property in Contour A and, where it exists under the direction of Contour A, state-proletarian property in Contour B. Personal property is excluded from this pure measure.

The central problem is that modern inequality measurement usually operates at the level of apparent inequality. It mixes different forms of property into one confused measure. On the one hand, it measures personal inequality. On the other hand, it also counts bourgeois property. Yet it excludes state-proletarian property, which is the collective property of the proletariat. For this reason, apparent inequality is not a neutral measure. It is an incomplete and distorted measure of inequality.

Standard indicators such as the Gini coefficient usually operate within this apparent form. They may describe the visible distribution of income or wealth, but they do not measure the real relation between the bourgeoisie and the proletariat unless state-proletarian property is included.

5.2 Meaning of the Forms of Inequality

The forms of inequality defined above do not express the same thing.

Apparent inequality is the false surface form. It mixes personal property and bourgeois property, but excludes state-proletarian property. It therefore shows an incomplete and distorted picture. It sees the property of the bourgeoisie, but it does not see the collective property of the proletariat.

Personal inequality is the real measure of inequality between people as individuals. It shows how people live in the ordinary material sense: income, consumption, housing, savings, and personal property. In this sense, personal inequality is the proper measure of personal life.

Pure real inequality has a different meaning. At first sight, it appears to be a measure of inequality. In its real content, however, it expresses the suppression of the bourgeoisie in productive and commanding property.

Let BP denote bourgeois property in productive capital. Let SP_A denote state-proletarian property in Contour A, and let SP_B denote state-proletarian property in Contour B under the direction of Contour A. Then pure real inequality can be represented as

$$PRI = \frac{SP_A + SP_B}{SP_A + SP_B + BP}. \tag{5.1}$$

The higher this value is, the more productive and commanding property has been removed from bourgeois ownership. Pure real inequality therefore does not show how individuals live. It shows how strongly the bourgeoisie is suppressed as a class.

This suppression begins with state-proletarian ownership of Contour A, its substantial part, or its decisive nodes. It increases when ownership moves from decisive ownership toward full ownership of Contour A. It increases further when state-proletarian ownership extends beyond Contour A into Contour B.

Real inequality is the unity of personal inequality and pure real inequality. It combines two questions: how people live, and how strongly the bourgeoisie is suppressed in the structure of property.

Thus, real inequality can be represented as

$$RI = (PI, PRI), \tag{5.2}$$

where PI denotes personal inequality and PRI denotes pure real inequality.

Real inequality therefore shows how personal life exists inside a definite structure of class power.

Real inequality therefore expresses the contradiction of the modern world itself. The world remains class-based and historically capitalist, but within it the proletariat can acquire power through state-proletarian ownership and the suppression of bourgeois ownership. Real inequality captures this contradiction. It shows how personal inequality persists while bourgeois power is weakened or suppressed in the commanding structure of the economy. The higher the suppression of the bourgeoisie in productive and commanding property, the more the same level of personal inequality changes its class meaning.

Remark 6. Greater suppression of the bourgeoisie does not by itself mean greater proletarian power, since proletarian power already exists when Contour A belongs to the proletariat, even in incomplete form.

6 Measuring the Forms of Inequality

6.1 Personal Inequality

This subsection measures the first coordinate of real inequality: personal inequality. Personal inequality is measured through consumption-based inequality, not income inequality. The purpose of this measure is to approximate inequality in the material conditions of personal life.

For China, India, and Russia, the measure is taken directly from the World Bank Poverty and Inequality Platform using consumption-based Gini estimates. (World Bank 2026b)

For France and Germany, consumption-based Gini coefficients are estimated from grouped expenditure data reported by Eurostat. (Eurostat 2025)

For the United Kingdom, consumption-based Gini coefficients are estimated from grouped expenditure data reported in the ONS Family Spending workbook. (Office for National Statistics 2025)

For the United States, consumption-based Gini coefficients are estimated from grouped expenditure data reported in FRED series based on BLS consumer expenditure deciles. (Federal Reserve Bank of St. Louis 2025)

These grouped estimates must be interpreted as lower-bound approximations, because inequality inside each group is not observed.

Table 1: Personal inequality measured by consumption-based Gini coefficients

Country	Code	Year	Consumption Gini	Method
China	CHN	2022	0.360	Direct consumption Gini
Germany	DEU	2020	0.155	Grouped consumption Gini, quintiles
France	FRA	2020	0.147	Grouped consumption Gini, quintiles
United Kingdom	GBR	2024	0.229	Grouped consumption Gini, deciles
India	IND	2022	0.255	Direct consumption Gini
Russian Federation	RUS	2020	0.361	Direct consumption Gini
United States	USA	2024	0.288	Grouped consumption Gini, deciles

Table 1 shows that France and Germany have the lowest measured personal inequality in this sample. The United Kingdom and the United States are higher than continental Europe. China and Russia have the highest personal inequality among the selected countries, while India occupies an intermediate position. (Eurostat 2025; Federal Reserve Bank of St. Louis 2025; Office for National Statistics 2025; World Bank 2026b)

These results do not measure class rule. They measure only the distribution of personal consumption. They therefore describe the first coordinate of real inequality, not the whole structure of real inequality.

Several hypotheses may explain the observed distribution.

First, the lower values for France and Germany may reflect stronger European social policy, redistribution, public services, and welfare institutions. These institutions can reduce inequality in personal consumption even inside bourgeois economic systems.

Second, part of the result may reflect data quality and comparability. China, India, and Russia use direct consumption Gini estimates, while the United States, the United Kingdom, France, and Germany

use grouped Gini estimates. Grouped Gini estimates tend to underestimate inequality because they do not observe inequality inside each group.

Third, higher personal inequality in China and Russia may reflect global inequality in proletarian income and development. In the world economy, the proletariat of the East has historically had lower income and consumption capacity than the proletariat of the West, while rich strata can approach globally comparable levels of consumption. This may increase personal inequality in countries of accelerated or uneven development without proving stronger bourgeois class rule.

Fourth, the higher value for the United States compared with continental Europe may reflect the weaker development of social policy and the stronger role of market provision in personal life. In this sense, the United States appears closer to the raw form of personal inequality inside advanced capitalism.

The main conclusion is therefore limited but important. Personal inequality is not identical with class power. A country may have high personal inequality while the bourgeoisie is strongly suppressed in productive and commanding property. Conversely, a country may have lower personal inequality while the bourgeoisie remains the ruling class. The second coordinate of real inequality must therefore be measured separately.

6.2 Apparent Inequality

This subsection measures the second form of inequality: apparent inequality. Apparent inequality is measured through wealth concentration. It captures the visible concentration of private wealth, including financial assets, non-financial assets, business assets, and other forms of household wealth.

In this paper, apparent inequality is measured by the wealth share of the richest 10 percent and the richest 1 percent. These indicators are taken from Our World in Data, based on the World Inequality Database. They are used here as proxies for the visible concentration of wealth under the usual method of inequality measurement. (Our World in Data 2026a,b; World Inequality Database 2026)

Table 2: Apparent inequality measured by top wealth shares

Country	Code	Year	Top 10% wealth share	Top 1% wealth share
China	CHN	2024	68.0	30.4
Germany	DEU	2024	58.5	27.8
France	FRA	2024	59.9	27.7
United Kingdom	GBR	2024	57.1	21.3
India	IND	2024	65.0	40.1
Russian Federation	RUS	2017	71.2	42.4
United States	USA	2024	69.5	34.8

The table shows that apparent inequality is high across the whole sample. In every selected country, the richest 10 percent own more than half of total wealth. This confirms that wealth concentration is a general feature of the modern world, not a feature of one region alone. (Our World in Data 2026a,b; World Inequality Database 2026)

Russia, the United States, and China have the highest top 10 percent wealth shares in the sample. India and Russia have especially high top 1 percent wealth shares. The United Kingdom has the lowest

top 1 percent wealth share in the sample, although its top 10 percent still own more than half of total wealth.

These results must be interpreted carefully. Apparent inequality measures visible private wealth concentration. It counts bourgeois property and household wealth, but it does not count state-proletarian property as collective proletarian ownership. For this reason, apparent inequality remains an incomplete measure. It shows how wealth appears when private wealth is counted, but collective state-proletarian property is excluded.

The conclusion is therefore limited but necessary. Apparent inequality is useful as an object of critique. It shows the visible concentration of wealth under the usual method of measurement. But it cannot measure real inequality, because it excludes the collective property of the proletariat. The next empirical task is to measure pure real inequality by comparing bourgeois property with state-proletarian property.

6.3 Pure Real Inequality

This subsection measures the third form of inequality: pure real inequality. In theoretical terms, pure real inequality measures the degree to which bourgeois property is suppressed in productive and commanding property.

However, public property cannot be counted mechanically. A state may own infrastructure, public buildings, roads, or public enterprises without thereby expressing proletarian class power. For this reason, the measure used here is gated. Public capital is counted as state-proletarian property only after the country passes the Contour A gate.

This distinction also clarifies a common confusion in the criticism of state ownership. The relevant object in this paper is specific control over Contour A, rather than generic ownership of state firms. Contour A includes banking and credit, energy, oil and gas, natural resources, external finance and currency, telecom and digital infrastructure, strategic industry, and transport nodes such as railways and ports. These nodes perform a structural directing function inside the economy.

For this reason, the usual claim that state-owned firms are inefficient often changes the object of analysis. A Contour A institution should be judged by its role in directing investment, credit, infrastructure, energy, external payments, logistics, and strategic capacity. Its function is structural command. Private-firm profitability is therefore an insufficient criterion for evaluating it. A state firm inside Contour B may be evaluated as a producer. A state-controlled node inside Contour A must be evaluated as part of the commanding structure of the economy.

This is why the gate is necessary. The measure counts public capital as Pure Real Inequality only when public ownership is connected to the commanding contour. It separates ordinary public ownership from state-proletarian ownership of the nodes that determine the direction of the economic system.

The Contour A gate is defined as follows. Let A_{gate} be the weighted state-control score across decisive nodes of Contour A. The gate is passed only if

$$A_{\text{gate}} \geq 0.50. \tag{6.1}$$

If the gate is not passed, then public capital is not counted as state-proletarian property for the purpose of pure real inequality. Formally,

$$G_A = \begin{cases} 1, & A_{\text{gate}} \geq 0.50, \\ 0, & A_{\text{gate}} < 0.50. \end{cases} \tag{6.2}$$

The country-level Contour A gate scores are constructed from sector-specific evidence on banking and credit, energy and power, oil, gas and coal, strategic infrastructure, transport, telecom and digital infrastructure, and external financial control. (Agence des participations de l'État 2026b; Bank of Russia 2026; Board of Governors of the Federal Reserve System 2026; China National Petroleum Corporation 2026; China State Railway Group 2026a; Indian Railways 2026; International Monetary Fund 2025; KfW 2026; Office for National Statistics 2026; Oil and Natural Gas Corporation 2026; People's Bank of China 2026; PONARS Eurasia 2026; Power Grid Corporation of India 2026; Rosneft 2026; State Bank of India 2026; State Grid Corporation of China 2026; State-owned Assets Supervision and Administration Commission of the State Council 2026; U.S. Energy Information Administration 2025c)

The raw capital-stock proxy is measured as

$$PRI_{\text{capital}} = \frac{K_{\text{public}}}{K_{\text{public}} + K_{\text{private}}}, \tag{6.3}$$

where K_{public} denotes public capital stock and K_{private} denotes private capital stock. The data are taken from the IMF Investment and Capital Stock Dataset through DBnomics. (DBnomics 2026; International Monetary Fund 2026)

The gated measure is then

$$PRI_{\text{gated}} = G_A \cdot PRI_{\text{capital}}. \tag{6.4}$$

This means that public capital is counted only if the commanding contour is first established as non-bourgeois. If the gate is not passed, then public capital remains public capital inside a bourgeois system and is not counted as state-proletarian property.

The Contour A gate is coded from country-sector evidence on state control over banking, monetary authority, energy, oil and gas, natural resources, telecom, transport, and strategic infrastructure. The core cases use IMF, official state enterprise, energy, banking, and sectoral evidence. (China National Petroleum Corporation 2026; China State Railway Group 2026b; International Monetary Fund 2025; OECD 2024c; People's Bank of China 2026; PONARS Eurasia 2026; Rosneft 2026; State Grid Corporation of China 2026; State-owned Assets Supervision and Administration Commission of the State Council 2026; U.S. Energy Information Administration 2025c)

Table 3: Pure real inequality measured by a gated public-capital proxy

Country	Code	Year	Contour A gate	Raw capital proxy	Gated PRI
Russian Federation	RUS	2017	0.950	0.613	0.613
China	CHN	2017	1.000	0.508	0.508
India	IND	2017	0.650	0.327	0.327
United Kingdom	GBR	2017	0.025	0.283	0.000
United States	USA	2017	0.075	0.269	0.000
France	FRA	2017	0.225	0.249	0.000
Germany	DEU	2017	0.100	0.183	0.000

Table 3 shows the effect of the gate. Its raw capital proxy is taken from the IMF Investment and Capital Stock Dataset through DBnomics, while its core-country gate codings use the country-level Contour A evidence cited above. (DBnomics 2026; International Monetary Fund 2026) Public capital exists in every selected country, including the Western countries. But public capital is not automatically state-proletarian property. It becomes relevant for pure real inequality only when the state controls the commanding contour of the economy.

Russia, China, and India pass the Contour A gate in the current coding. Their public capital stock is therefore counted as a preliminary proxy for state-proletarian property. The Western control-group countries do not pass the gate. Their public capital stock is therefore set to zero in the gated measure.

Within this preliminary gated proxy, Russia receives a higher value than China. It means only that, after the Contour A gate is passed, the measured degree of bourgeois suppression through public capital stock is higher in Russia than in China under this proxy.

The measure must not be read as a measure of state strength, development, military power, or historical capability. The existence of proletarian class power is determined by the ownership of Contour A. Pure real inequality measures something narrower: the degree to which bourgeois property is displaced by state-proletarian property after the gate has been passed. A system with near-complete bourgeois suppression and a system with partial bourgeois suppression may both express proletarian class power if the commanding contour belongs to the proletariat.

This also means that pure real inequality may change historically without changing the basic class form of the system. In future work, this dynamic can be studied as a temporal curve (the Smile): bourgeois suppression may begin at a very high level, decline during periods of so call “anti-market” expansion, and rise again after that. The present paper does not develop that historical model. It only establishes the static measurement logic.

The main conclusion is therefore methodological. Pure real inequality must be measured through a chain. First, the Contour A gate is tested. Second, public capital is counted only if the gate is passed. Third, the resulting value is interpreted not as power itself, but as the measured degree of bourgeois suppression.

6.4 Extending Pure Real Inequality to a Wider Country Sample

The previous subsection defined Pure Real Inequality as a gated measure of public capital and set out the rule by which public capital is counted only after the Contour A gate is passed. I now extend that same measurement procedure to a wider sample of countries.

The logic therefore remains the same as above. The formula and gate structure already introduced in the previous subsection are retained here without modification. What changes is only the empirical scope: the same gated public-capital component of Pure Real Inequality is now applied to a broader cross-country sample.

The expanded Contour A coding draws on official central-bank, national oil company, state electricity, state telecom, state railway, sovereign wealth fund, SOE, IMF, World Bank, EIA, NRGI, WBA, Reuters, and State Department sources for the relevant country-sector nodes. (Abu Dhabi National Oil Company 2026; Bank Negara Malaysia 2026; Bank of Thailand 2026; Central Bank of Egypt 2026; Central Bank of Iran 2026; Central Bank of Nigeria 2026; Central Bank of Uzbekistan 2026; CORPOELEC 2026; e& 2026; Egyptian Electricity Holding Company 2026; Electricity Generating Authority of Thailand 2026; Empresa Nacional de Electricidad 2026; Encyclopaedia Britannica 2026; Ethiopian Airlines 2026b; Ethiopian Electric Power 2026; Government of Pakistan 2024; IDE-JETRO 2026a; International Energy Agency 2026; International Monetary Fund 2024a,d; Islamic Republic of Iran Railways 2026; National Bank of Ethiopia 2026; National Electric Grid of Uzbekistan 2026; National Telecom Public Company Limited 2026; Natural Resource Governance Institute 2026c; Nigerian Railway Corporation 2026; NNPC Limited 2026; Pakistan Railways 2026; Petróleos de Venezuela 2026; PETRONAS 2026a; Petrovietnam 2026; PTT Public Company Limited 2026; Public Investment Fund 2024a; Saudi Electricity Company 2026; Sonelgaz 2026a; State Bank of Pakistan 2026; State Bank of Vietnam 2026; State Railway of Thailand 2026; TAQA 2026; Tavanir 2026; Telekom Malaysia 2026; Tenaga Nasional Berhad 2026; Transmission Company of Nigeria 2026; U.S. Department of State 2024a,c; U.S. Department of the Treasury 2026a; U.S. Energy Information Administration 2025a; Uzbekistan Railways 2026; Uzbekneftegaz 2026; Vietnam Electricity 2026; Vietnam Railways 2026; Viettel 2026; WAPDA 2026; World Bank 2026a; World Benchmarking Alliance 2026a,c; Yacimientos Petrolíferos Fiscales Bolivianos 2026)

The expanded Contour A validation uses country-sector evidence from official state bodies, central banks, SOE reports, international financial institutions, energy agencies, and sector-specific institutional profiles. (Abu Dhabi National Oil Company 2026; Banco Central do Brasil 2026; Banco de la República 2026; Banco de México 2026; Bangladesh Bank 2026; Bangladesh Power Development Board 2026; Bangladesh Railway 2026; Bangladesh Telecommunication Regulatory Commission 2026; Bank Negara Malaysia 2026; Bank of Thailand 2026; BNDES 2026; Central Bank of Egypt 2026; Central Bank of Iran 2026; Central Bank of Kenya 2026; Central Bank of Nigeria 2026; Central Bank of the Republic of Türkiye 2026; Central Bank of Uzbekistan 2026; Comisión Federal de Electricidad 2026; CORPOELEC 2026; e& 2025; Ecopetrol 2026; Egyptian Electricity Holding Company 2026; Egyptian General Petroleum Corporation 2026; Electricity Generating Authority of Thailand 2026; Empresa Nacional de Electricidad 2026; Eskom 2026; Ethiopian Airlines 2026a; Ethiopian Electric Power 2026; Government of Pakistan 2024; IDE-JETRO 2026b; International Monetary Fund 2024b,c,d; Kenya Electricity Transmission Company 2026; Kenya Railways 2026; National Bank of Ethiopia 2024; National Electric Grid of Uzbekistan 2026; National Telecom Public Company Limited 2026; Natural Resource Governance Institute 2026a,b,c; Nigerian Railway Corporation 2026; NNPC Limited 2026; OECD 2026a;

Pakistan Railways 2026; Pertamina 2026; Petrobangla 2026; Petrobras 2026; Petróleos de Venezuela 2026; Petróleos Mexicanos 2026; PETRONAS 2026b; PLN 2026; Public Investment Fund 2024b; Railways of the Islamic Republic of Iran 2026; Saudi Electricity Company 2026; Sonelgaz 2026b; South African Reserve Bank 2026; State Bank of Pakistan 2026; State Railway of Thailand 2026; TAQA Distribution 2026; TAQA Transmission 2026; Tavanir 2026; Telekom Malaysia 2026; Telkom Indonesia 2026; Tenaga Nasional Berhad 2026; Transmission Company of Nigeria 2026; Transnet 2026; Türkiye Wealth Fund 2026; U.S. Department of State 2024b; U.S. Department of the Treasury 2026b; U.S. Energy Information Administration 2025b; Uzbekistan Railways 2026; Uzbekneftegaz 2026; World Bank 2026a; World Benchmarking Alliance 2026b,c; Yacimientos Petrolíferos Fiscales Bolivianos 2026)

The gated Pure Real Inequality values in Table 4 continue to use the same IMF/DBnomics raw public-capital series as Table 3, and the China, India, and Russia rows retain the same core-country gate coding used in the initial measurement. (DBnomics 2026; International Monetary Fund 2026)

The expanded sample contains 59 countries. Of these, 22 currently pass the Contour A gate and therefore receive a nonzero gated Pure Real Inequality value. Four Western control cases fail the gate—the United Kingdom, the United States, France, and Germany. The remaining 33 countries fall into the category of gate unknown / further research needed. They are not failed cases; they remain unclassified pending further Contour A validation.

Table 4: Countries with $G_A = 1$: gated Pure Real Inequality in the expanded sample

Country	Code	Bloc	Gate score	Gated Pure Real Inequality	Gate quality	Classification
Venezuela	VEN	Global South	0.525	0.650	borderline floor pass	gated high bourgeois suppression
Bolivia	BOL	Global South	0.500	0.628	borderline floor pass	gated high bourgeois suppression
Russian Federation	RUS	BRICS	0.950	0.613	core pass	gated high bourgeois suppression
Saudi Arabia	SAU	BRICS	0.500	0.523	borderline floor pass	gated high bourgeois suppression
Ethiopia	ETH	BRICS	0.500	0.522	borderline floor pass	gated high bourgeois suppression
Algeria	DZA	Global South	0.500	0.518	borderline floor pass	gated high bourgeois suppression

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Table 4: Countries with $G_A = 1$: gated Pure Real Inequality in the expanded sample (Continued)

Country	Code	Bloc	Gate score	Gated Pure Real Inequality	Gate quality	Classification
China	CHN	BRICS	1.000	0.508	core pass	gated high bourgeois suppression
Malaysia	MYS	Global South	0.500	0.487	borderline floor pass	gated medium bourgeois suppression
United Arab Emirates	ARE	BRICS	0.500	0.464	borderline floor pass	gated medium bourgeois suppression
Vietnam	VNM	Global South	0.750	0.357	strong floor pass	gated medium bourgeois suppression
Thailand	THA	Global South	0.675	0.353	strong floor pass	gated medium bourgeois suppression
Pakistan	PAK	Global South	0.575	0.341	borderline floor pass	gated medium bourgeois suppression
India	IND	BRICS	0.650	0.327	core pass	gated medium bourgeois suppression
Kenya	KEN	Global South	0.525	0.321	borderline floor pass	gated medium bourgeois suppression
Uzbekistan	UZB	Global South	0.700	0.311	strong floor pass	gated medium bourgeois suppression
Nigeria	NGA	Global South	0.500	0.301	borderline floor pass	gated medium bourgeois suppression
Egypt	EGY	BRICS	0.625	0.293	strong floor pass	gated medium bourgeois suppression
Türkiye	TUR	Global South	0.575	0.280	borderline floor pass	gated medium bourgeois suppression

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Table 4: Countries with $G_A = 1$: gated Pure Real Inequality in the expanded sample (Continued)

Country	Code	Bloc	Gate score	Gated Pure Real Inequality	Gate quality	Classification
Bangladesh	BGD	Global South	0.625	0.261	strong floor pass	gated medium bourgeois suppression
Mexico	MEX	Global South	0.500	0.252	borderline floor pass	gated medium bourgeois suppression
Iran	IRN	BRICS	0.550	0.227	borderline floor pass	gated low bourgeois suppression
Indonesia	IDN	BRICS	0.775	0.142	strong floor pass	gated low bourgeois suppression

The highest measured values in the expanded sample are Venezuela, Bolivia, Russia, Saudi Arabia, Ethiopia, Algeria, and China. These values do not mean that these systems are better, more powerful, more developed, or historically superior. They mean only that, under the previously defined gated Pure Real Inequality measure, a larger share of public capital is counted after the country passes the Contour A gate.

The gate-quality classes are limited empirical markers and should be read cautiously.

The label `core_pass` denotes manually checked core cases from the initial measurement. The label `strong_floor_pass` denotes expanded-sample cases with validated evidence clearly above the gate threshold.

The label `borderline_floor_pass` denotes preliminary expanded-sample cases near the threshold and therefore requiring later review. Borderline cases should be treated as provisional measurement results, not as final historical classifications.

6.5 Extending Pure Real Inequality to the Global North

The previous subsection extended Pure Real Inequality beyond the initial core cases. This subsection completes the control side by adding the Global North / West. Some of them have non-trivial raw public capital shares. The point is that their public capital does not pass the Contour A gate. The Global North screening uses OECD state-ownership evidence and official country-level state ownership, public enterprise, central-bank, energy, telecom, railway, and public-infrastructure sources to distinguish public capital from decisive control over Contour A. (Agence des participations de l'État 2026a; Government Offices of Sweden 2026a; Ministero dell'Economia e delle Finanze 2026; Ministry of Economy and Finance, Republic of Korea 2026; Ministry of Finance Japan 2026a; Ministry of State Assets of Poland 2026; New Zealand Treasury 2026b; Norwegian Ministry of Trade, Industry and Fisheries 2026; OECD 2024a,c; Prime Minister's Office Finland 2026) Therefore it is not counted as Pure Real Inequality.

The Global North control scores are constructed as upper-bound gate checks: public or partially state-linked nodes are recorded, but public capital is counted as Pure Real Inequality only if those nodes amount to decisive control of Contour A. (Agence des participations de l'État 2026b; Australian Government 2026; Board of Governors of the Federal Reserve System 2026; Federal Holding and Investment Company 2026; Government of Canada 2026; Government of the Netherlands 2026; Government Offices of Sweden 2026b; KfW 2026; Korea Development Bank 2026; Ministry of Economy and Finance Italy 2026; Ministry of Finance Japan 2026b; Ministry of State Assets of Poland 2026; New Zealand Treasury 2026a; Norwegian Ministry of Trade, Industry and Fisheries 2026; OECD 2026b; Office for National Statistics 2026; Prime Minister's Office Finland 2026)

The raw public capital shares reported in Table 5 are taken from the IMF Investment and Capital Stock Dataset through DBnomics. (DBnomics 2026; International Monetary Fund 2026)

Table 5: Global North Contour A gate screen and Pure Real Inequality

Country	Code	Raw public capital share	Contour A score	Gate	Pure Real Inequality
Poland	POL	0.261	0.350	0	0.000
Norway	NOR	n.a.	0.350	0	0.000
South Korea	KOR	0.211	0.325	0	0.000
Japan	JPN	0.355	0.300	0	0.000
Italy	ITA	0.197	0.250	0	0.000
France	FRA	0.249	0.225	0	0.000
Sweden	SWE	n.a.	0.225	0	0.000
New Zealand	NZL	0.335	0.175	0	0.000
Finland	FIN	0.236	0.175	0	0.000
Greece	GRC	0.198	0.175	0	0.000
Australia	AUS	0.249	0.150	0	0.000
Canada	CAN	0.211	0.150	0	0.000
Belgium	BEL	0.189	0.150	0	0.000
Netherlands	NLD	0.256	0.100	0	0.000
Portugal	PRT	0.243	0.100	0	0.000
Czechia	CZE	0.221	0.100	0	0.000
Switzerland	CHE	0.202	0.100	0	0.000
Austria	AUT	0.199	0.100	0	0.000
Germany	DEU	0.183	0.100	0	0.000
Denmark	DNK	n.a.	0.100	0	0.000
Spain	ESP	n.a.	0.100	0	0.000
United States	USA	0.269	0.075	0	0.000
United Kingdom	GBR	0.283	0.025	0	0.000
Hungary	HUN	n.a.	0.025	0	0.000

The ordering inside the Global North table is substantively important. The highest-scoring Western cases are Poland, Norway, South Korea, Japan, Italy, France, Sweden, and New Zealand. These are the hardest Western cases for the gate because they contain the strongest visible public-sector, infrastructure, developmental-state, or strategic-state elements inside the Global North sample.

Their failure gives the control group strong interpretive force. The Western cases closest to the Contour A threshold still remain below it. They remain capitalist cases in the ordinary structural sense, and the gate confirms this classification. This result raises the burden for every lower-scoring Western case. Since the strongest Western candidates fail the gate, the remaining Western cases are weaker candidates for Pure Real Inequality.

6.6 Real Inequality as a Vector

The preceding subsections have already defined the relevant components. Real inequality is better represented as a two-dimensional vector composed of personal inequality and Pure Real Inequality:

$$\mathbf{RI}_i = \left(I_i^{personal}, I_i^{pure-real} \right).$$

Here $I_i^{personal}$ is personal inequality, measured by the consumption Gini where available, and $I_i^{pure-real}$ is Pure Real Inequality, measured by the gated public-capital component defined in the previous subsections. The present subsection uses only the seven-country core sample.

The entries in Table 6 combine the personal-inequality values from Table 1 with the gated Pure Real Inequality values from Table 3; they therefore inherit the raw-source bases cited in those tables. (DBnomics 2026; Eurostat 2025; Federal Reserve Bank of St. Louis 2025; International Monetary Fund 2026; Office for National Statistics 2025; World Bank 2026b)

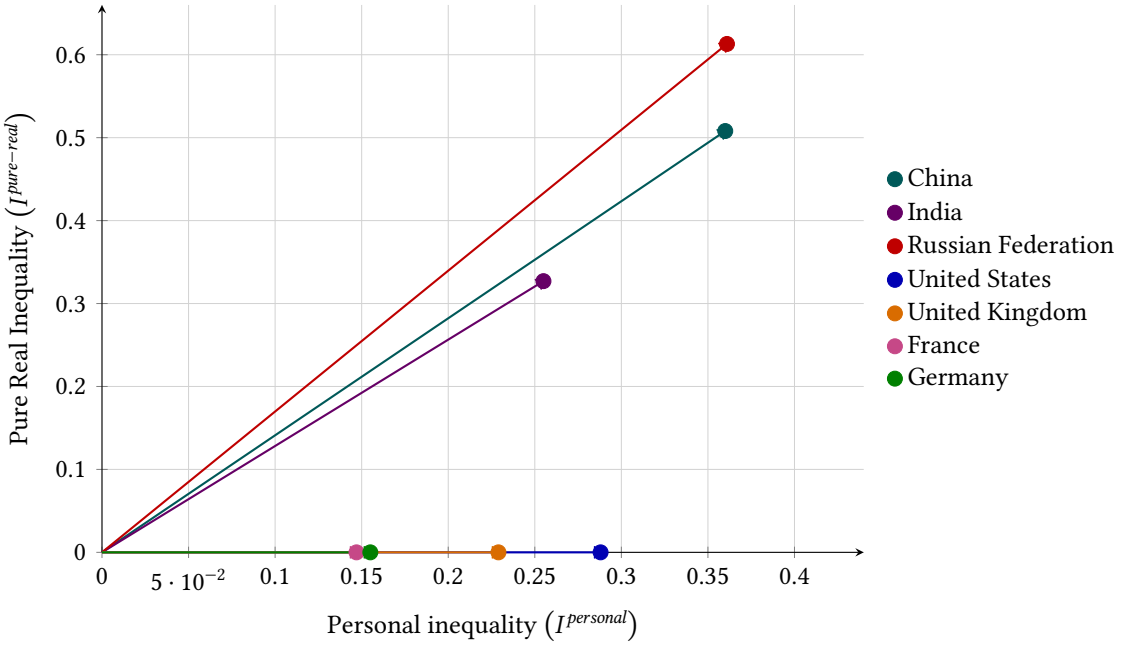
A country can have low or moderate personal inequality while still having high Pure Real Inequality, or it can have high personal inequality while Pure Real Inequality is zero.

Table 6: Real inequality vector for the core country sample

Country	Code	Personal inequality	Pure Real Inequality	Real inequality vector
China	CHN	0.360	0.508	(0.360, 0.508)
India	IND	0.255	0.327	(0.255, 0.327)
Russian Federation	RUS	0.361	0.613	(0.361, 0.613)
United States	USA	0.288	0.000	(0.288, 0.000)
United Kingdom	GBR	0.229	0.000	(0.229, 0.000)
France	FRA	0.147	0.000	(0.147, 0.000)
Germany	DEU	0.155	0.000	(0.155, 0.000)

Figure 1 plots the same real inequality vectors in the $(I^{personal}, I^{pure-real})$ plane.

Figure 1: Real inequality vectors in the core country sample



The table reports the two coordinates directly and preserves their joint structure rather than collapsing them into one summary number.

Within the core sample, Russia, China, and India have nonzero Pure Real Inequality because they pass the Contour A gate. The United States, the United Kingdom, France, and Germany have Pure Real Inequality equal to zero because they fail the Contour A gate. This means that their public capital is not counted as Pure Real Inequality under the gate logic.

For a hypothetical country X, real inequality can be represented in two ways:

$$RI_X^{class} = (0.00,\ 1.00)$$

and

$$RI_X^{people} = (0.24,\ 1.00).$$

The first expression describes the class structure of inequality: the bourgeoisie does not exist as a separate property-consumption pole, so class-based property inequality is equal to zero, while Pure Real Inequality is equal to one, since the bourgeoisie has been fully displaced from productive and commanding property. The second expression describes the same country at the level of the population as a whole: differences in income, consumption, housing, and savings still exist among individuals, so the first component is equal to 0.24, but the second component remains 1.00, because these personal differences do not become bourgeois power over the commanding contour of the economy.

6.7 Robustness of the Contour A Gate

This subsection reports a robustness check for Pure Real Inequality based on alternative Contour A gate thresholds and a focused public-capital confounding check for the Global North. The country-level threshold sensitivity table is retained as a diagnostic output and is not reproduced here.

The robustness checks are derived from the same raw public-capital source and the same Contour A gate evidence used above. (DBnomics 2026; International Monetary Fund 2026) In particular, Tables 3 to 5 provide the underlying public-capital and gate inputs reused here.

Table 7: Threshold sensitivity of the Contour A gate

Gate cutoff	Classified countries	Countries passing	Western passes	Non-Western passes	Max Western gate score	Distance below baseline cutoff
0.50	46	22	0	22	0.35	0.15
0.55	46	12	0	12	0.35	0.20
0.60	46	9	0	9	0.35	0.25
0.70	46	5	0	5	0.35	0.35

The threshold-sensitivity check has a limited but useful purpose. It shows how many non-Western pass cases remain under stricter Contour A thresholds, while the West remains below the baseline threshold and below the empirical separator discussed below. At the baseline threshold of 0.50, 22 classified countries pass the gate. At 0.55, 12 countries remain. At 0.60, 9 countries remain. At 0.70, 5 countries remain. This shows which cases are robust to stricter gate rules and which cases are baseline-threshold cases. The robustness checks reuse the same Contour A gate coding and the same public-capital source base described above. (DBnomics 2026; International Monetary Fund 2024a,d, 2025, 2026; OECD 2024c; State-owned Assets Supervision and Administration Commission of the State Council 2026; World Bank 2026a)

The Global North result is read through distance from the gate, not through the upward-threshold exercise. The maximum Global North / West Contour A gate score is 0.35. Therefore, the strongest Western cases remain 0.15 below the baseline threshold of 0.50. The threshold would have to be lowered substantially before any Western case could enter the passing set. This is why the Western control group is substantively separated from the passing cases rather than merely excluded by a fragile cutoff.

Table 8: Western public-capital cases that fail the Contour A gate

Code	Country	Raw public capital share	Contour A gate score	Pure Real Inequality	Classification
JPN	Japan	0.355	0.300	0.000	Public capital not counted; gate failed
NZL	New Zealand	0.335	0.175	0.000	Public capital not counted; gate failed
GBR	United Kingdom	0.283	0.025	0.000	Public capital not counted; gate failed
USA	United States	0.269	0.075	0.000	Public capital not counted; gate failed
POL	Poland	0.261	0.350	0.000	Public capital not counted; gate failed
NLD	Netherlands	0.256	0.100	0.000	Public capital not counted; gate failed

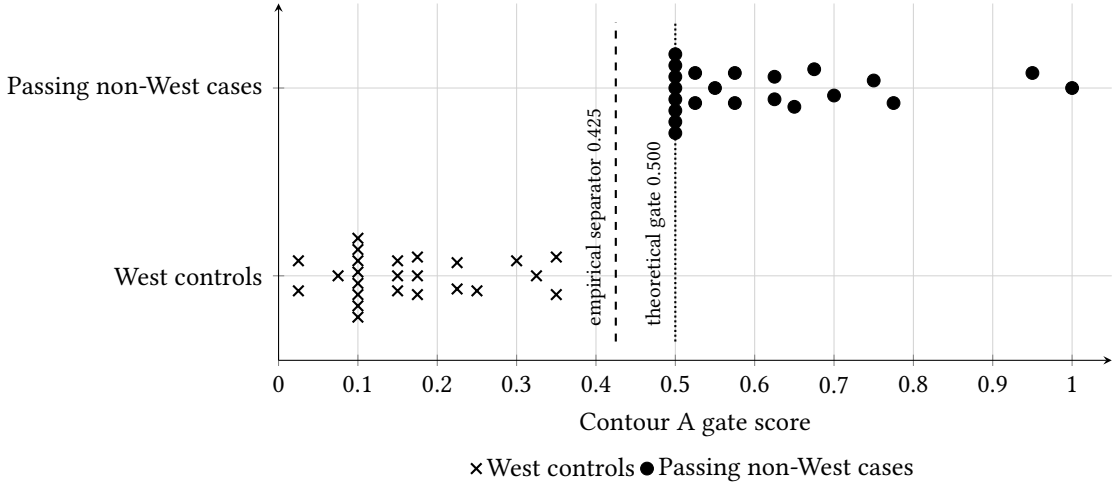
Table 8 shows the public-capital confounding check for high-public-capital Western cases. Japan, New Zealand, the United Kingdom, the United States, Poland, and the Netherlands have comparatively high raw public-capital shares, but each receives Pure Real Inequality equal to zero because each fails the Contour A gate. This confirms that Pure Real Inequality counts public capital only when it is embedded in a decisive commanding contour.

A further empirical-threshold robustness check reaches the same conclusion. The theoretical baseline gate uses 0.50 as the Contour-A threshold. We then estimate a sample-implied empirical separator from the observed gate-score distribution. In the classified sample, the highest Global North / West score is 0.35, while the lowest passing non-Western score is 0.50. The midpoint between these observed values is 0.425. This empirical separator yields the same substantive classification as the theoretical 0.50 threshold: 22 countries pass, and zero Western countries pass. The baseline result is therefore supported both by the theoretical threshold and by the observed separation in the sample. The West/non-West split is not sitting on a fragile boundary. The nearest Western cases remain below even the empirical separator, while the passing countries remain above it. This strengthens the interpretation of Pure Real Inequality as a real structural separator rather than a cosmetic relabeling of public capital.

As an additional unsupervised diagnostic, I also applied two-cluster k-means clustering to the Contour A gate score. (MacQueen 1967) The clustering procedure did not use bloc membership, West/non-West status, or the prior classification as input. It used only the gate score. The result reproduced the same substantive separation: all 22 passing non-Western cases were assigned to the higher-score cluster, while all 24 Western cases were assigned to the lower-score cluster. A two-dimensional version using both the gate score and the raw public-capital share produced the same substantive result for the countries with non-missing public-capital data. This confirms that the separation is visible in the gate-score structure itself, rather than imposed only by the theoretical threshold.

Figure 2 visualizes the same separation: the highest Western gate scores remain below both the empirical separator and the theoretical gate threshold, while all passing non-Western cases lie above them.

Figure 2: Contour A gate-score separation in the classified sample



The visual gap between 0.350 and 0.500 is the key robustness result: the empirical clustering boundary falls inside this empty interval, so the clustering diagnostic and the theoretical gate produce the same classification.

6.8 Anticapital and the Contour A Gate

The results also clarify the relation between this paper and my earlier work on the Communist Indicator. In that work, I classified the world into two historical poles: capital and anticapital. Capital denoted the Western and Western-aligned pole, while anticapital denoted the socialist, anti-imperialist, anti-Western, and counter-hegemonic pole. That classification was historical and geopolitical. It measured the balance of forces between these two poles through GDP at purchasing power parity. (Isteni 2026)

The present paper adds a narrower structural test. It asks whether public capital is connected to control over Contour A. The Contour A gate therefore gives an institutional form to part of what the Communist Indicator treated as anticapital. It tests whether the anti-Western or non-Western pole also contains state control over the commanding nodes of the economy.

The convergence is strong. Core anticapital cases from the earlier framework, including China, Russia, India, Iran, Vietnam, Algeria, Uzbekistan, Venezuela, and Bolivia, pass the Contour A gate in the present measurement. The Western control cases fail the gate. This means that the older anticapital classification and the new Contour A test point in the same direction.

7 Methodology of the Contour A Gate

The Contour A gate is the coding rule that determines whether public capital can be counted as state-proletarian property for the purpose of Pure Real Inequality. Public ownership is not counted

mechanically. It is counted only when public ownership is connected to state control over the commanding contour of the economy.

The gate therefore measures a narrower object than public ownership in general. It measures whether the state controls the decisive nodes through which the direction of the economic system is formed. The relevant question is whether the state controls the commanding nodes of Contour A.

7.1 Coding domains

The Contour A coding uses the following domains:

1. banking and credit;
2. monetary authority, external finance, currency, and sovereign financial capacity;
3. energy and power grid;
4. oil, gas, coal, and hydrocarbon resources;
5. natural resources and land;
6. transport nodes, including railways, ports, and strategic logistics;
7. telecom and digital infrastructure;
8. strategic industry, including defence-industrial capacity where relevant.

Strategic infrastructure is treated as a cross-cutting property of several domains rather than as a separate additional score. It is observed through energy grids, transport systems, ports, railways, telecom networks, digital infrastructure, and strategic industry. This avoids double counting the same institutional control twice.

7.2 Sector-level scoring scale

Each domain receives a state-control score on a common scale:

$$s_{ij} \in \{0,\ 0.25,\ 0.50,\ 1.00\}, \tag{7.1}$$

where s_{ij} is the score of country i in domain j.

The coding scale is interpreted as follows:

- 1.00: decisive or full state control;
- 0.50: partial or mixed control with significant state direction;
- 0.25: weak, minority, residual, or limited state presence;
- 0.00: no meaningful state control over the relevant domain.

The same scale is used across all countries and all domains.

A score of 1.00 is assigned when the state owns, directly controls, or decisively directs the main institution or network in the domain. Examples include a state-owned national oil company controlling the hydrocarbon sector, a state-owned electricity grid operator controlling transmission, state-owned dominant banks, a state railway monopoly, or a state-controlled telecom infrastructure node.

A score of 0.50 is assigned when control is mixed but the state retains significant direction. This includes cases where the state is a major shareholder, where state-owned enterprises remain central but coexist with large private firms, where regulation and ownership jointly give the state substantial direction, or where the state controls one decisive part of the domain but not the whole domain.

A score of 0.25 is assigned when the state has a weak or limited presence. This includes minority holdings, residual public enterprises, partial infrastructure ownership without sectoral command, or public participation that does not give the state decisive direction.

A score of 0.00 is assigned when the domain is privately controlled, when public ownership is marginal, or when the state has no meaningful ownership or directing role in the relevant commanding node.

Ambiguous cases are not forced upward. If evidence is insufficient, the domain is treated as unverified. For the floor score, unverified domains do not receive positive credit. They remain flagged for review.

7.3 Domain-specific coding rules

Banking and credit receive a high weight because credit allocation is one of the main mechanisms through which an economy is directed. Full state control is coded when state-owned or state-controlled banks dominate banking assets, development finance, or strategic credit allocation. Partial control is coded when state banks are important but do not dominate the sector. Weak control is coded when the state has only limited minority banking presence. No control is coded when banking and credit are primarily private and state-directed credit is marginal.

Monetary authority and external financial control are coded through the external-financial-currency domain. The mere existence of a central bank is not enough for a high score, because every modern state normally has a central bank. A positive score requires evidence that monetary authority, exchange-rate administration, reserve management, capital controls, sovereign financial institutions, or external payment systems contribute to state direction of the economy. Full control is coded when monetary and external-financial administration are integrated into state economic direction. Partial control is coded when the state has significant but incomplete currency or external-financial direction. Weak control is coded when the state has only formal or limited capacity. No control is coded when the domain does not contribute meaningfully to command over the economy.

Energy and power grid are coded by control over generation, transmission, distribution, and grid planning. Full control is coded when the state controls the electricity system or its decisive grid/transmission nodes. Partial control is coded when state firms control major parts of the sector but coexist with significant private or marketized control. Weak control is coded when the state has limited holdings or regulatory influence without command. No control is coded when the electricity system is effectively private or fragmented without state direction.

Oil, gas, coal, and hydrocarbon resources are coded by control over extraction, production, transport, refining, and national resource companies. Full control is coded when a state-owned national oil, gas, or coal company controls the decisive hydrocarbon node. Partial control is coded when the state controls important firms or resource rights but private or foreign firms remain structurally significant. Weak control is coded when state involvement is limited. No control is coded when the domain is primarily privately controlled.

Natural resources and land are coded separately from oil and gas when evidence concerns mining, land administration, mineral resources, or general resource sovereignty. Full control is coded when the state decisively controls resource ownership, concessions, or national resource institutions. Partial control is coded when the state has significant resource-governance power but not decisive ownership. Weak control is coded when public control is limited or mainly regulatory. No control is coded when resource ownership and command are effectively private.

Transport nodes include railways, ports, and strategic logistics. Full control is coded when the state owns or decisively controls the national railway system, major ports, or strategic transport infrastructure. Partial control is coded when public ownership is important but mixed with major private control. Weak control is coded when the state owns only limited transport assets. No control is coded when strategic transport nodes are not meaningfully state-controlled.

Telecom and digital infrastructure are coded by control over national telecom carriers, backbone infrastructure, digital networks, and strategic communication systems. Full control is coded when the state controls the decisive telecom or digital infrastructure node. Partial control is coded when the state has significant ownership or direction but the sector is mixed. Weak control is coded when state presence is limited. No control is coded when the sector is primarily private and public control is marginal.

Strategic industry is coded when evidence exists for state control over defence industry, heavy industry, aerospace, strategic manufacturing, or other nationally strategic industrial capacity. Full control is coded when the state controls the decisive strategic-industrial node. Partial control is coded when state control is important but incomplete. Weak control is coded when state presence is limited. No control is coded when no meaningful state strategic-industrial control is observed.

7.4 Weights and aggregation

The final Contour A gate score is a weighted sum of the domain scores:

$$A_{\text{gate},i} = \sum_{j=1}^{8} w_j s_{ij}, \tag{7.2}$$

where w_j is the weight of domain j, s_{ij} is the state-control score of country i in domain j, and the weights sum to one:

$$\sum_{j=1}^{8} w_j = 1. \tag{7.3}$$

The weights used in the present coding are:

Table 9: Contour A gate weights

Domain	Weight
Banking and credit	0.20
Energy and power grid	0.15
Oil, gas, and coal	0.15
Transport, railways, ports, and logistics	0.15
Natural resources and land	0.10
Telecom and digital infrastructure	0.10
Strategic industry	0.10
Monetary authority, external finance, and currency	0.05

Banking and credit receive the largest weight because credit allocation is the most general mechanism of economic direction. Energy, hydrocarbons, and transport receive high weights because they determine the physical movement of production, logistics, and infrastructure. Natural resources, telecom, and strategic industry receive medium weights because they are decisive in many countries but may not be equally central in every economy. Monetary and external-financial control receives a lower separate weight because formal central-bank existence alone is not sufficient evidence of Contour A command and because part of financial command is already captured through banking and credit.

The weighting scheme also prevents one sector from mechanically determining the whole result. No single domain can contribute more than 0.20 to the final score. A country cannot pass the gate through one strong sector alone. It must show state control across several commanding nodes.

Missing or unverified evidence is not renormalized upward. If a domain has no verified evidence, it contributes zero to the floor score and remains flagged for further review. This rule prevents countries with evidence from only one or two sectors from receiving artificially high scores because of missing data. The score is therefore a conservative floor score rather than an optimistic estimate.

7.5 Gate threshold

The gate is passed when

$$A_{\text{gate},i} \geq 0.50. \tag{7.4}$$

The threshold 0.50 has a substantive interpretation. Since the weights sum to one, a score of 0.50 means that the state controls at least half of the weighted commanding contour, or an equivalent combination of decisive and partial control across several domains. It is therefore not a claim that the state owns everything. It is a claim that state control reaches the level of decisive command over the economic direction of the system.

The threshold is also not an isolated arbitrary line. It is supported by the structure of the classified sample. In the current classified cases, the highest Global North / West control score is 0.35, while the lowest passing non-Western score is 0.50. The observed gap between 0.35 and 0.50 leaves an empirical separation around the theoretical threshold. The midpoint of this gap is 0.425. Using this empirical separator produces the same substantive classification as the theoretical 0.50 threshold.

Countries near the threshold are treated as borderline cases. A borderline means that the country reaches the gate through a specific combination of commanding nodes. Such cases require explicit notes identifying the nodes that carry the score.

7.6 Gate-quality classes

The final gate result is supplemented by a gate-quality class.

- `core_pass`: a manually checked core case with strong prior validation and clear evidence of state control over Contour A.
- `strong_floor_pass`: an expanded-sample case with a conservative floor score clearly above the threshold, usually $A_{\text{gate}} \geq 0.60$.
- `borderline_floor_pass`: an expanded-sample case that passes the gate but remains near the threshold, usually $0.50 \leq A_{\text{gate}} < 0.60$.
- `fail`: a case with sufficient evidence that the state does not control the commanding contour.
- `unknown`: a case where available evidence is insufficient for a final gate classification.

These classes do not change the value of the score. They indicate the evidentiary quality of the classification. A core pass and a borderline pass both pass the gate, but the core pass is more secure. A borderline pass remains valid under the stated coding rule, while also requiring later review.

7.7 Western and Global North control cases

The Global North / West cases are treated as control cases. These countries may have public capital, public enterprises, public infrastructure, state minority holdings, public banks, or state-owned firms. This is not sufficient for Pure Real Inequality. Public capital becomes state-proletarian property only when it is connected to decisive control over Contour A.

Therefore, public capital in a Western capitalist system is not automatically counted. If the state owns public assets but does not control the commanding contour, the country fails the gate and its public capital receives a gated Pure Real Inequality value of zero.

This rule separates public capital as such from state-proletarian property. It prevents the measure from counting ordinary public assets inside bourgeois systems as proletarian ownership.

7.8 Borderline cases

Borderline cases require explicit interpretation. If a country receives a score near 0.50, the coding must identify the exact nodes that allow the country to pass the gate. The relevant question is whether the score is carried by decisive control over commanding nodes or by weak public presence across unrelated sectors.

A borderline pass is acceptable when the score comes from domains such as state banking, national energy systems, national oil and gas companies, state railways, sovereign external-financial direction, telecom infrastructure, or strategic industry. A borderline pass is not acceptable if it comes only from scattered minority holdings, ordinary public enterprises, or public ownership outside the commanding contour.

Thus, borderline cases are treated as provisional but meaningful. They pass the gate under the stated rule, but they remain high-priority cases for later evidence review.

7.9 Robustness checks

The gate is tested against stricter thresholds:

$$A_{\text{gate}} \geq 0.55, \quad A_{\text{gate}} \geq 0.60, \quad A_{\text{gate}} \geq 0.70. \tag{7.5}$$

These checks show which passing countries are robust and which are threshold-sensitive. Countries that continue to pass at 0.60 or 0.70 are robust passes. Countries that pass at 0.50 but fail at 0.55 or 0.60 are threshold-sensitive borderline passes.

The threshold sensitivity check is not mainly a test of whether Western cases enter when the threshold is raised. Raising the threshold can only reduce the number of passing countries. Its purpose is to show which non-Western passing cases remain under stricter definitions of Contour A command.

The Western control cases are instead evaluated by their distance below the baseline and empirical thresholds. In the classified sample, the highest Western score is 0.35. The lowest passing non-Western score is 0.50. This produces a separation gap of 0.15. The empirical midpoint of this gap is 0.425. Western cases remain below both the theoretical threshold and the empirical separator.

A clustering diagnostic gives the same result. Two-cluster k-means clustering applied only to the Contour A gate score separates the classified sample into a higher-score cluster and a lower-score cluster. The clustering does not use bloc membership, West/non-West status, or prior classification as input. The higher-score cluster contains the 22 passing non-Western cases, while the lower-score cluster contains the 24 Western control cases. A two-dimensional version using both the gate score and raw public-capital share gives the same substantive result for countries with non-missing public-capital data.

The robustness checks therefore support the same conclusion: the gate is not simply relabeling public capital. It identifies a structural separation between public capital embedded in Contour A command and public capital that exists without such command.

7.10 Reproducibility checklist

To reproduce the Contour A gate, the researcher needs four types of information.

First, the researcher needs country-sector evidence for each Contour A domain: banking and credit, external finance and currency, energy and power grid, oil and gas, natural resources, transport, telecom, and strategic industry.

Second, the researcher needs source documentation for each score. Acceptable sources include official state enterprise reports, central bank publications, government ownership reports, IMF reports, World Bank reports, OECD state-ownership sources, EIA country profiles, national oil company documentation, national electricity and grid documentation, railway and port authorities, telecom company ownership reports, and other sector-specific evidence.

Third, the researcher must assign sector scores using the common scale 0, 0.25, 0.50, and 1.00. Each score must be justified by notes and sources.

Fourth, the researcher must compute the weighted sum without renormalizing missing evidence upward. Missing or unverified sectors contribute zero to the floor score and remain flagged for further review.

The independently checkable decisions are:

1. whether each country-sector source actually supports the assigned score;
2. whether the same scoring rule is applied across countries;
3. whether the weights are applied correctly;
4. whether missing evidence is handled conservatively;
5. whether the final score correctly determines pass, fail, or unknown status;
6. whether borderline cases identify the exact nodes that carry the score.

After these steps, the reader can trace the full path from sector evidence to final Contour A gate classification.

8 Conclusion

This paper introduced a measure of power and inequality that treats inequality as a relation between personal life and class ownership of the commanding structure of the economy. The central claim is that inequality cannot be fully understood through income, consumption, household wealth, or private wealth concentration alone. These measures are necessary for describing personal and apparent inequality. They become incomplete for real inequality when the class form of ownership over the commanding structure of the economy remains outside the measurement.

The theoretical chain developed in the paper begins with the two basic economic classes of the modern capitalist world: bourgeoisie and proletariat. The bourgeoisie owns capital and the means of production. The proletariat sells labour-power and does not individually own the means of production. Since one sovereign economic system expresses one ruling economic class, class rule takes two basic forms: bourgeois rule or proletarian rule.

The paper located the direction of the economic system in Contour A, the commanding contour. Contour A includes the decisive nodes through which production, investment, credit, energy, infrastructure, transport, resources, land, strategic industry, and external economic movement are directed. Contour B produces and executes within the direction determined by Contour A. Ownership of Contour A therefore determines the class direction of the economic system.

This framework also clarified the form of proletarian ownership. Proletarian ownership of productive capital cannot be individual, because individual ownership of productive capital places the owner in a private-owner relation to capital. Proletarian ownership of productive capital is therefore collective. Under the conditions defined in the paper, state ownership of Contour A, its substantial part, or its decisive nodes can constitute state-proletarian property because it removes the commanding contour from bourgeois ownership and gives collective form to proletarian command over the direction of the economy.

On this basis, the paper distinguished four forms of inequality. Personal inequality measures inequality between individuals and households in income, consumption, housing, savings, and per-

sonal property. Apparent inequality measures visible private wealth concentration while excluding state-proletarian property. Pure Real Inequality measures the suppression of bourgeois property in productive and commanding property. Real inequality combines personal inequality and Pure Real Inequality as a vector.

This vector representation is the main measurement result. Real inequality has two coordinates: how people live as individuals and how strongly bourgeois property is suppressed in productive and commanding property. For example, a country can have high personal inequality and high Pure Real Inequality. Or a country can also have lower personal inequality and zero Pure Real Inequality. These are different structural positions, and the vector form preserves the difference.

The empirical analysis implemented this framework through three measures. Personal inequality was measured through consumption-based Gini coefficients. Apparent inequality was measured through top wealth shares. Pure Real Inequality was measured through a gated public-capital proxy. The gate is central: public capital is counted as state-proletarian property only when the country passes the Contour A Gate. This prevents ordinary public capital inside bourgeois systems from being counted as proletarian property.

The core sample showed the logic of the method. China, Russia, and India have nonzero Pure Real Inequality because they pass the Contour A Gate. The United States, the United Kingdom, France, and Germany have Pure Real Inequality equal to zero because their public capital does not pass the gate. This result does not mean that the Western control cases have no inequality or no public capital. It means that their public capital is not counted as state-proletarian property under the gate logic.

The expanded sample and the Global North control analysis developed the same result on a wider basis. The passing cases receive nonzero gated Pure Real Inequality values because their public capital is connected to the commanding contour. The Western control cases fail the gate even when they have visible public capital or state-sector elements. The robustness checks reinforce this distinction. Stricter thresholds reduce the number of passing countries, while Western control cases remain below the gate. The empirical separator and clustering diagnostics show a clear gap between the highest Western gate scores and the lowest passing non-Western scores.

The contribution of the work is a framework for measuring inequality as class power. The paper distinguishes distributional inequality from structural class ownership. It defines the commanding contour of the economy. It introduces a gate for determining when public capital becomes relevant as state-proletarian property. It measures Pure Real Inequality through a gated public-capital proxy. It represents real inequality as a vector connecting personal living conditions with the suppression of bourgeois property.

Future research can extend this framework in several directions. The sector-level coding of Contour A can be improved with more detailed country evidence. The measurement can be extended into time series. Historical movement in Pure Real Inequality can be studied as public capital rises, falls, or changes class form. The relation between changes in personal inequality and changes in bourgeois-property suppression can be examined across periods and regions.

The central result remains the same: inequality must be measured as the class form of ownership over the commanding structure of the economy.

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