Crisis of Capitalism, Systemic Transition and Economic Liberation

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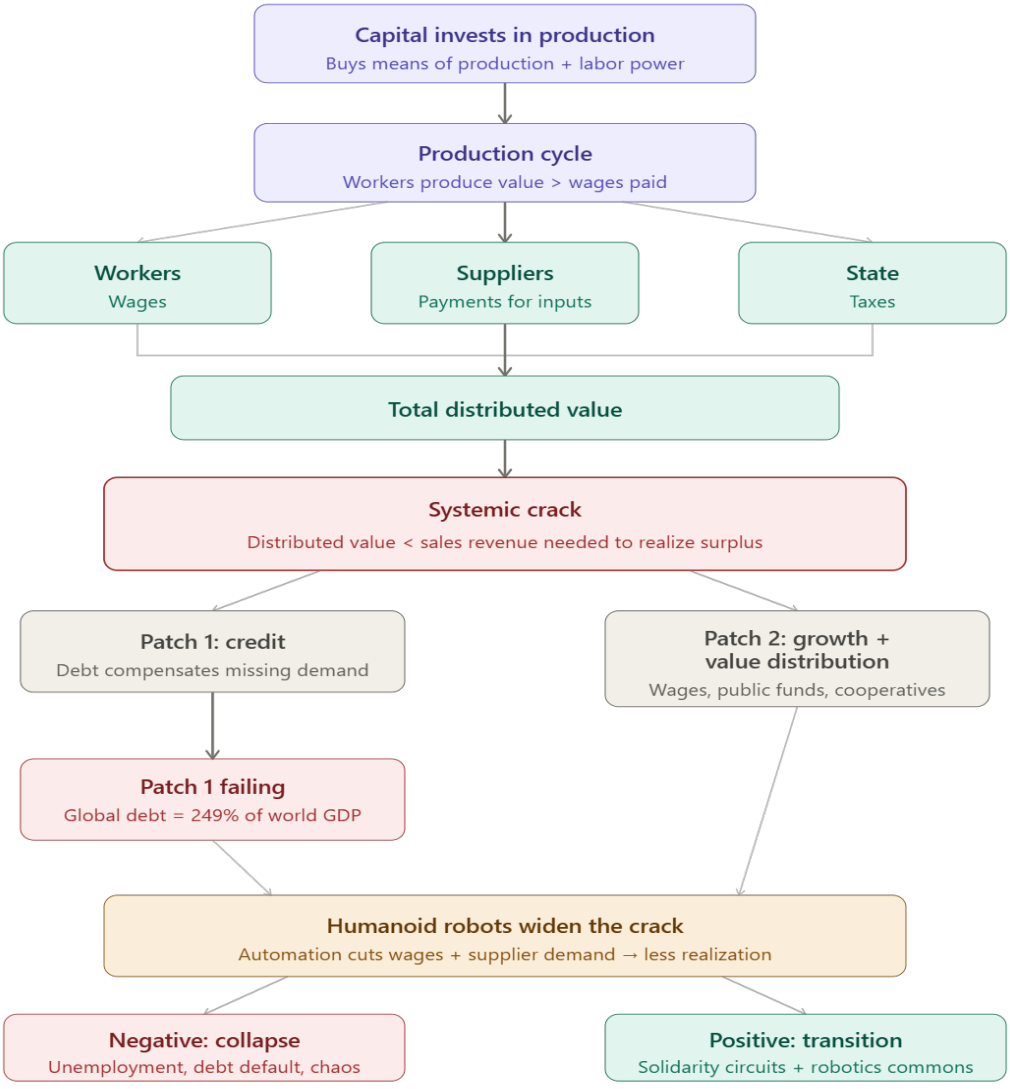
Capital invests in production
Buys means of production + labor power
Production cycle
Workers produce value > wages paid
Workers
Wages
Suppliers
Payments for inputs
State
Taxes
Total distributed value
Systemic crack
Distributed value < sales revenue needed to realize surplus
Patch 1: credit
Debt compensates missing demand
Patch 2: growth + value distribution
Wages, public funds, cooperatives
Patch 1 failing
Global debt = 249% of world GDP
Humanoid robots widen the crack
Automation cuts wages + supplier demand → less realization
Negative: collapse
Unemployment, debt default, chaos
Positive: transition
Solidarity circuits + robotics commons

Table 1: Living labor substitution curve by industrial humanoids — projection by Wright's Law (20% biennial rate, base 2026)

Year	Efficiency	Workers replaced (24h)	Robots per 3 shifts
2026	50%	1.5	2.0
2028	60%	1.8	1.7
2030	72%	2.2	1.4
2032	86%	2.6	1.2
2034	104%	3.1	1.0
2036	124%	3.7	0.8
2038	149%	4.5	0.7

Source: Author's elaboration, starting from the current 50% efficiency of the humanoid robot relative to human efficiency in the industrial activities in which it is employed.

Table 2: Annual Cost Comparison — Human Team vs. Fleet of 2 Industrial Humanoid Robots (Values in US$ — Base year 2026)

Cost Component	Human Team (3 Shifts/Year)	Fleet of 2 Robots — Year 1	Notes
Acquisition / Salaries	138,000	200,000	2 × 100,000 (AgiBot A2 or equivalent)
Payroll Taxes and Benefits	41,400	0	30% overhead in the USA
Initial Integration	0	40,000	ERP software, 5G, safety (~20% of hardware)
Depreciation (5 years, linear)	0	40,000	20,000 per robot/year
Opex (Energy + AI + Maintenance)	600	14,000	~7,000 per unit/year
TOTAL COST YEAR 1	**180,000**	**294,000**	Robots more expensive than living labor only in the 1st year (high capex)
Recurring Annual Cost (Year 2+)	**180,000**	**54,000**	Only Opex + Depreciation
TOTAL COST IN 5 YEARS	**900,000**	**510,000**	Accumulated savings: **390,000** (43% lower)

Table 3 — Systemic crack breaking point for selected countries

Country	Annual wage (USD)	Payroll taxes (%)	Total cost/ worker/ year (USD)	Human TCO 5y (USD)	Fleet TCO (USD)	Rupture	Robot/ human efficiency (%)	Robots in fleet (units)	Robot price (USD)
USA	75,275	22.0	91,836	1,377,540	510,000	2026	50.00	2.0	100,000
Germany	64,873	20.4	78,107	1,171,605	510,000	2026	50.00	2.0	100,000
South Korea	50,947	12.5	57,315	859,725	510,000	2026	50.00	2.0	100,000
Japan	49,446	15.5	57,110	856,650	510,000	2026	50.00	2.0	100,000
China	18,148	42.0	25,771	386,565	304,880	2028	60.00	1.7	67,240
Russia	20,131	26.0	25,365	380,475	304,880	2028	60.00	1.7	67,240
South Africa	19,831	3.0	20,426	306,390	304,880	2028	60.00	1.7	67,240
Brazil	7,430	68.0	12,483	187,245	186,759	2030	72.00	1.4	45,212
Indonesia	10,500	11.0	11,655	174,825	147,787	2031	78.87	1.3	37,074
Mexico	5,741	25.0	7,176	107,640	94,925	2033	94.65	1.1	24,929
Vietnam	4,040	21.5	4,908	73,620	63,285	2035	113.58	0.9	16,762
India	2,921	12.0	3,272	49,080	43,874	2037	136.29	0.7	11,271
Bangladesh	1,558	7.5	1,675	25,125	23,551	2041	196.26	0.5	5,096

Source: Author's elaboration with wage data from ILO (2026) for countries with 2024-2025 information and from Trading Economics (2026b) for others.

The Solidarity Economy's Structural Advantage

1. Solidarity Economy Circuits – SEC

Solidarity economy initiatives, linking credit, production, distribution and consumption using restricted AI, robotics and digital platforms, avoid being converted into sources of extraordinary surplus value for robotized capital.

2. A robotized cooperative can price below any capitalist firm

Any capitalist firm must structurally extract a profit rate. A robotized solidarity enterprise, with no shareholders to remunerate, can reduce prices to marginal cost and remain sustainable.

3. Part of production can be distributed free

Through blockchain systems, goods and services can circulate as multi-reciprocal donations, expanding productive chains and community good-living.

4. Capital cannot replicate this

Capital requires the money-form to pay investors and service debts. With the expansion of gift-exchange, the market can lose its operational base — not by decree, but by functional obsolescence.

"From each according to their capacities, to each according to their needs." — This is not a moral aspiration. ***It is a structural possibility****.*

Concluding Remarks

1 — Irresolvable structural crack

Each production cycle distributes less value than capital needs to receive back. Global debt at 249% of GDP marks the limit of the credit patch.

2 — Breaking point is now measurable

Robot fleet cost already 43% below human labor in the USA. High-income economies: 2026. Brazil & Russia: 2028–2030. India: 2037.

3 — Outcome is not predetermined

Technological sovereignty is a prerequisite for economic sovereignty. Technology without a project for distributing surplus produces only concentration.

4 — Solidarity economy's structural advantage

A robotized cooperative without shareholders can price below any capitalist. Gift-exchange can make the market lose its base by functional obsolescence.

The question is not whether humanoid robots and other new automated beings will come — it is **what the solidarity economy will have built when they arrive**