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INTERNATIONAL LABOR MARKETS DEVELOPING: INNOVATION, CAPITAL, AND POLICY

This study investigates the structural determinants of labor productivity, framing the development of international labor markets as a function of three critical variables: innovation transfer, capital depth, and regulatory policy. The research fundamentally refutes the “labor intensity” hypothesis often cited in transitional economies is a narrative attributing low output to insufficient individual diligence arguing instead that workforce productivity is not a derivative of physical exertion but of the macroeconomic environment surrounding the labor force. Rigorous analysis reveals that the distinction between high- and low-productivity nations is foundational: a worker operating an automated line is not working harder than a manual laborer but utilizing vastly higher leverage. Supporting this, historical OECD data establishes that 93% of Total Factor Productivity (TFP) growth over the last 130 years resulted from innovation, specifically the importation of knowledge embedded in capital goods [1, p. 470].

This dependence on imported technology creates a strict feedback loop for international labor markets: to import advanced capital goods, an economy must generate competitive exports to fund these purchases. However, many transitional economies fall into a “consumption trap,” where national savings are burned on importing depreciating consumer goods rather than investing in the productive assets required to close the technological gap. Consequently, the labor market requires a workforce capable of operating complex technologies to break this cycle, rather than merely consuming imports.

However, the analysis reveals that the capacity to adapt to this innovation imperative is severely constrained by distinct regional factors. For developing and transitional markets, the primary impediment is a “skills gap” exacerbated by policy failures. While education accounts for 49% of the variation in productivity growth, aggressive government mandates for tertiary enrollment have led to widespread “diploma inflation”. This creates a statistical illusion

of progress while masking a critical lack of functional literacy and cognitive skills required for technology transfer. The result is a paradoxical labor market characterized by high aggregate unemployment coexisting with a desperate shortage of qualified personnel, effectively blocking businesses from adopting advanced technologies because the complementary human capital is absent [2, p. 281].

Furthermore, the study utilizes the Hsieh-Klenow model to demonstrate that opaque regulatory barriers cause systemic resource misallocation. In these markets, “extractive institutions” frequently protect inefficient legacy enterprises or state-connected “zombie firms” from competition, creating a distorted marketplace where success is determined by political connection rather than economic efficiency [5, p. 126]. These inefficiencies act as a massive “implicit tax” on growth, physically preventing capital from flowing to productive innovators. Simulation data indicates that the removal of these distortions could boost TFP by 30–60% without requiring a single dollar of additional foreign investment, simply by liberating existing resources to flow to high-growth firms [3, p. 1425].

Conversely, in developed economies, the stability of the labor market is threatened by a crisis of capital accumulation due to demographic shifts. With the old-age dependency ratio in the EU approaching a critical 2:1 threshold by 2070, the traditional Pay-As-You-Go (PAYG) pension model creates a “fiscal pincer”. To maintain pension promises with fewer workers, the state must aggressively raise labor taxes, which mechanically reduces the disposable income available for private investment. This results in a “crowding out” effect where public consumption absorbs liquidity that should be directed toward corporate R&D.

The paper argues that sustainable development requires a pivot toward funded pension systems to generate “long money” when patient domestic capital that exceeds 145% to 210% of GDP in nations like the Netherlands and Switzerland. This accumulated wealth is essential for funding the large-scale automation and robotization necessary to counteract a shrinking workforce. Ultimately, the study confirms the validity of the Lewis Threshold, positing that economies must transition from saving 4–5% to 12–15% of national income to sustain the capital deepening required for global innovativeness. Thus, the “productivity puzzle” defies a monolithic solution, demanding “institutional hygiene” for the developing South and “capital deepening” for the aging North [4, p. 24].

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