Boosting Employment: Lessons from Natural Resource Abundant Countries

By Nils Maehle

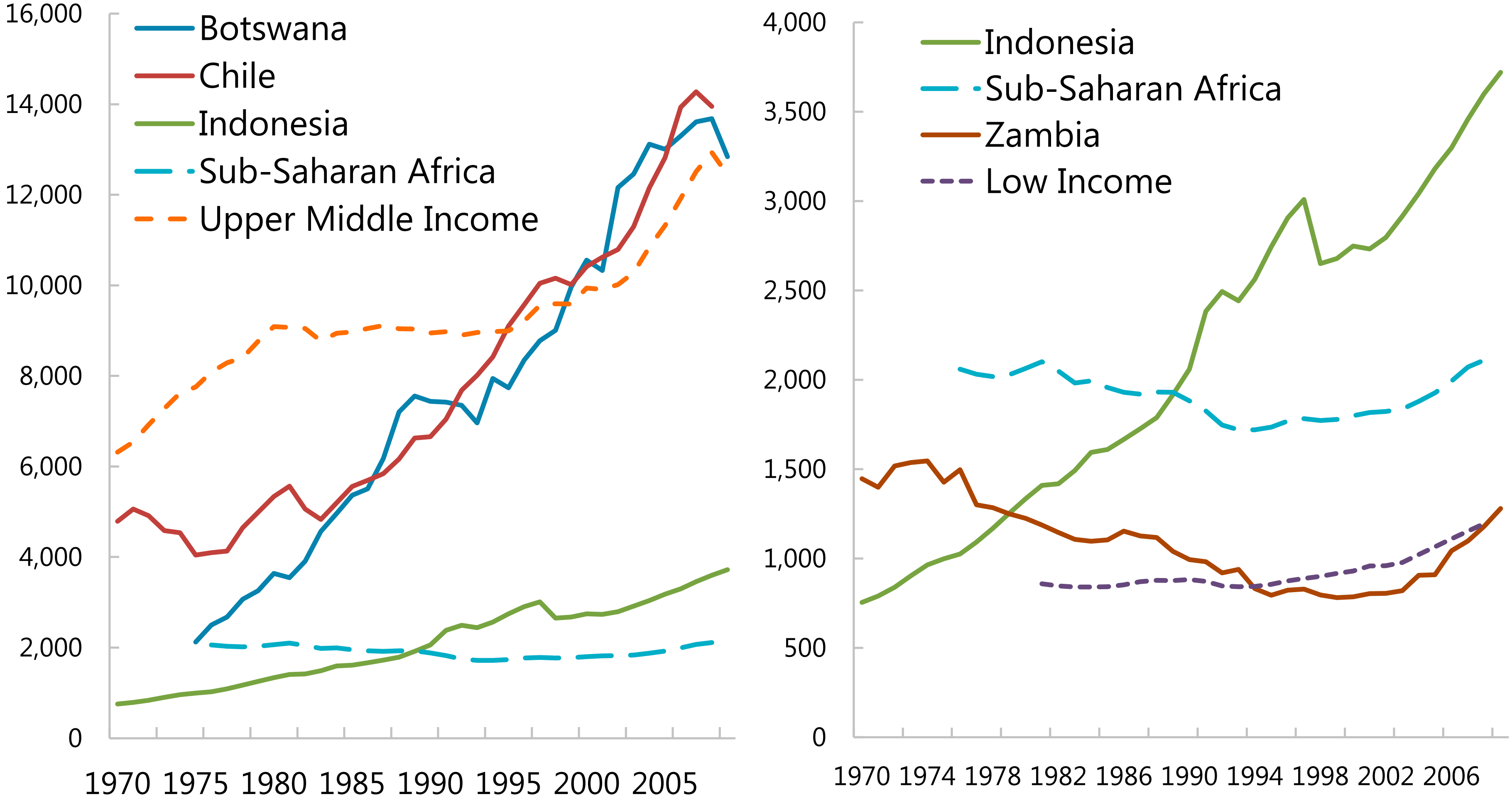
Literature Survey

- The “resource curse” literature
- Success stories—drawing on extensive literature on
  - **Botswana**—Prolonged high growth but with high unemployment and for a long time high poverty
  - **Chile**—Copper producer that has diversified out of copper dependency and greatly reduced poverty
  - **Indonesia**—Oil producer with one of the most pro-poor growth episodes in modern economic history—agriculture and rural sector development crucial

❖ Botswana and Indonesia: Two of 13 success stories identified by the 2008 Growth Commission Report

Botswana, Chile, Indonesia Catching Up

GNI per capita (constant 2009 US$, Purchasing Power Parity)



Sources: World Bank, *World Development Indicators*.

The 2008 Growth Report

Sustained High Growth is Catch Up Growth

Open and integrated world economy

- Allows transfer of Ideas, Technologies, and Know-How
  - FDI, foreign education, exports
- Provides deep elastic markets
- Require:
  - Mobile labor supply
  - High savings and investments rates
  - Patience and a long planning horizon

➢ **Quality of Government Policies is Key**

❖ Sustained growth key for poverty reduction

Resource Abundance a Blessing—Mineral Dependence a Curse

- Abundance a blessing
  - Revenues to finance education and investment
  - Development base for several high income countries (Australia, Canada, Finland, Norway, and the United States)
- Dependence a curse
  - Negative effect on growth and **employment**
  - Mining is capital intensive
    - Can crowd out more employment-creating production

- Dependence and the "Curse" not caused by an abundance but by policy failures
  - Same failures causes weak growth and hamper diversification

Policies for Avoiding a Resource Abundance Resulting in a Dependency Curse

- Avoid crowding out of foreign knowledge capital
  - Avoid Dutch disease
    - Overvalued exchange rates and/or wages depresses non-mineral exports
      - Fiscal discipline is key to sustained avoidance of an overvalued exchange rate, overheating, and excessive volatility
  - Increase openness to external trade and FDI
    - Avoid concentration of FDI in mining

- Learning-by-doing knowledge transfer through international trade and FDI key to long-term growth

Policies cont.

- Improve institutional quality
  - Natural resources a blessing if institutions are good
  - Fight rent seeking—protection of vested interests
    - Tariff protection and favors to selected few at the expense of the public at large
  - Fight corruption
  - Reduce income inequality
    - Robustly associated with longer growth spells
    - Address inequality at its sources instead of a direct redistribution of income
      - ➢Poorly designed efforts could undermine growth, and end up hurting the poor

Policies cont.

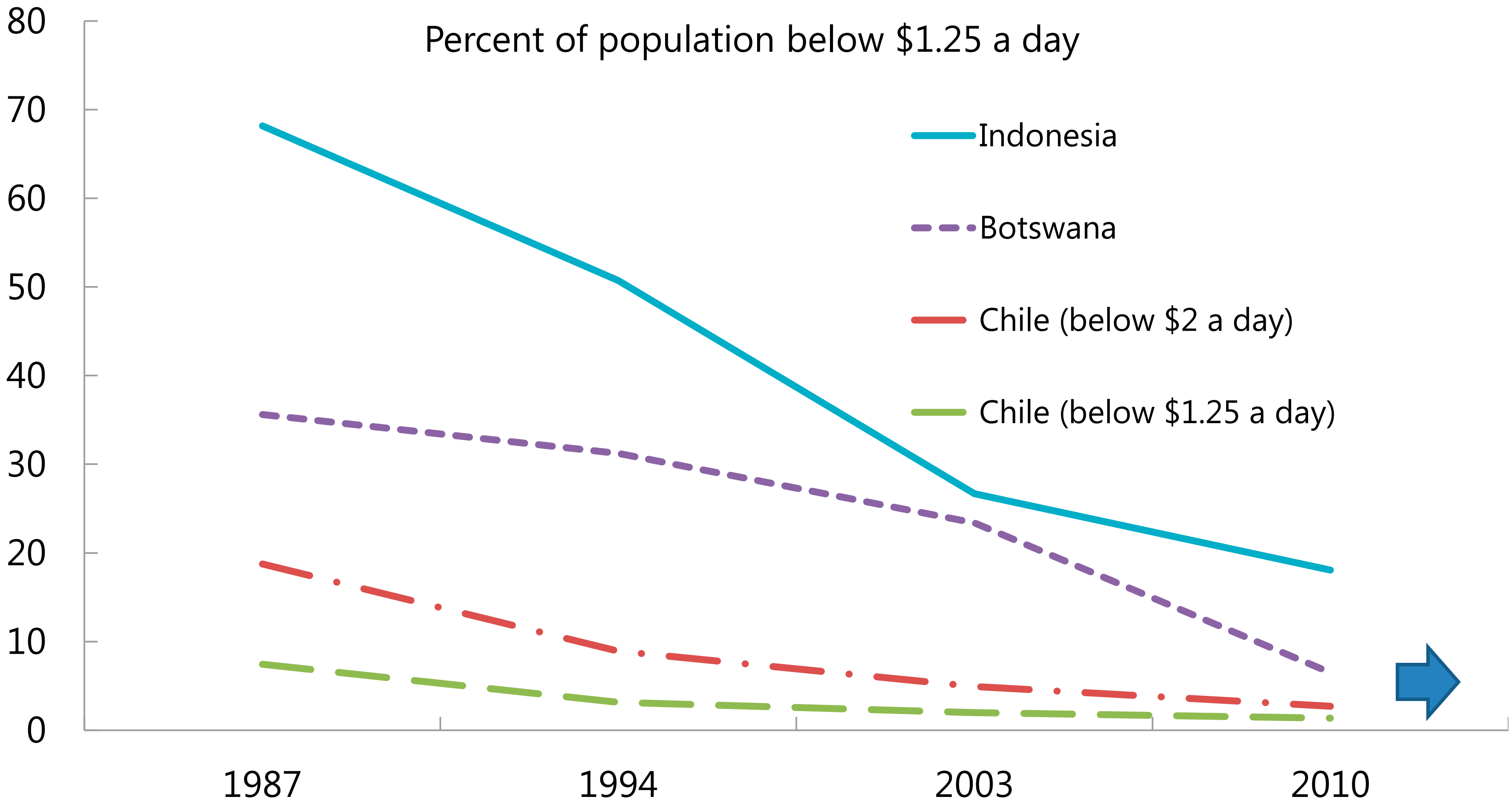
- Invest in Physical and Human Capital
  - High private and public investment is key to growth
    - ➢Invest in capacity to invest
  - Education and health are key to sustained high growth
- Develop the financial sector
  - Increasing evidence in favor of it causing growth
- Maintain macroeconomic stability
  - High inflation hampers growth and financial development
  - Instability hurts growth and hamper financial development
  - ➢Fiscal and monetary discipline is key to avoid high inflation and instability

❖**Inflation is particularly harmful for the poor**

Botswana, Chile, Indonesia Catching Up

- Botswana
  - 1966: Among the poorest countries in the world
  - 6.5% average per capita GDP growth since 1966
    - 3.2% average per capita growth 2000-11
  - 55th richest country in the world
    - Per capita GDP of US$16,000 (PPP, 2011)
    - US$9,500 (exchange rate conversion)
- Chile
  - 4% average per capita GDP growth since 1985
    - 3.0% average per capita growth 2000-11
  - 52nd richest country in the world
    - Per capita GDP of US$17,000 (PPP, 2011)
    - US$14,300 (exchange rate conversion)
- Indonesia
  - 5% average per capita income growth 1967-96
    - 3.8% average per capita growth 2000-11
    - Per capita GDP of US$ 4,600(PPP, 2011)
    - US$3,500 (exchange rate conversion)

Indonesia: One of the World's Most Pro-Poor Growth Records



Source: The World Bank, *World Development Indicators*.

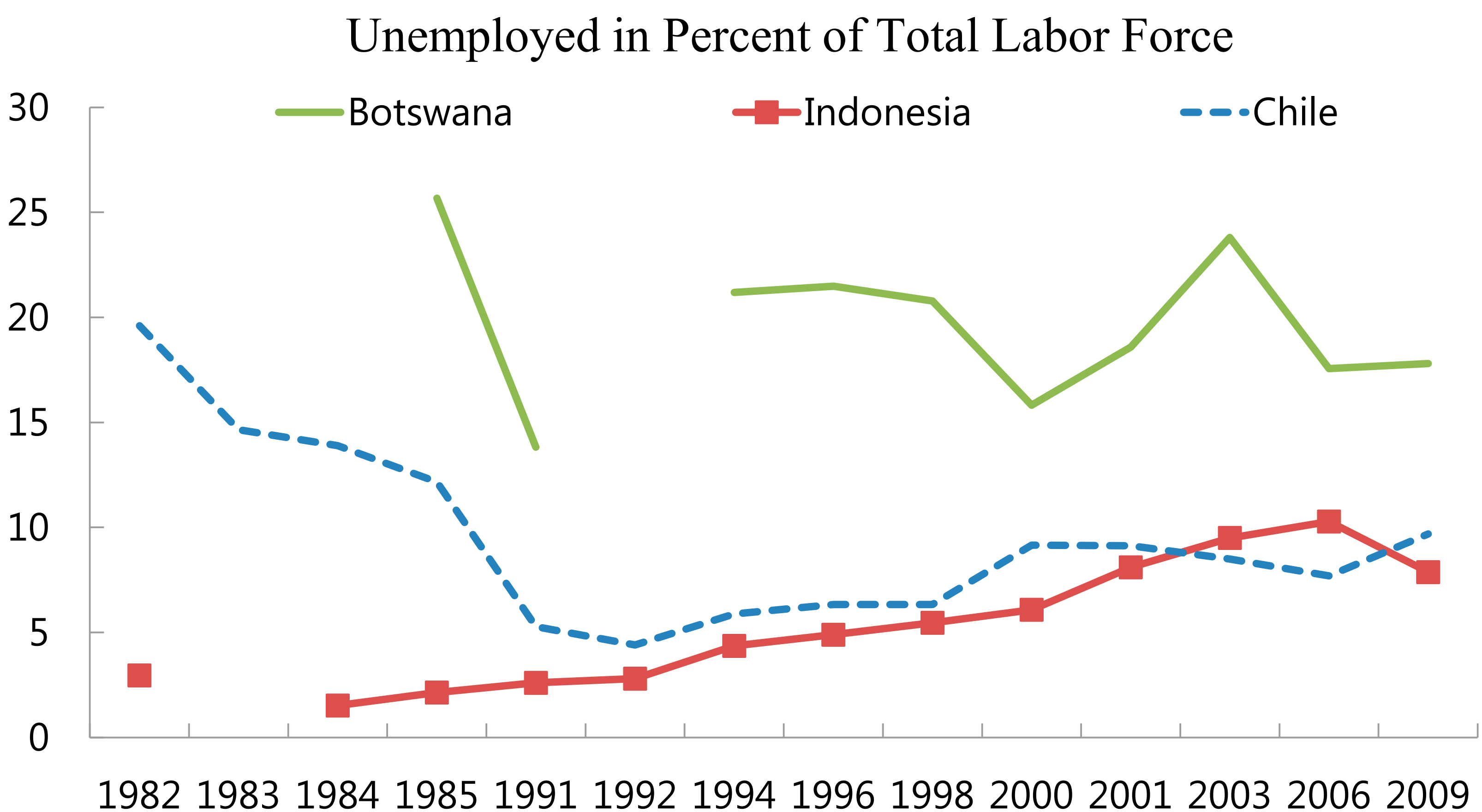
Indonesia: Low Inequality Helps

GINI Indices

- Indonesia:
  - 1984: 30.5
  - 2009: 36.8
- Chile:
  - 1987: 56.2
  - 2009: 52.1
- Botswana:
  - 1985: 51
  - 1994: 61
  - ➢ One of the world highest

- Most Equal
  - Sweden : 23 (2005)
  - Denmark: 24 (2005)
  - Norway: 25 (2008)
- Most Unequal
  - Namibia: 70.7 (2003)
  - South Africa: 65 (2005)

Botswana
Persistently High Unemployment



Sources: World Economic Outlook, WB World Development Indicators, and Botswana Central Statistical Office.

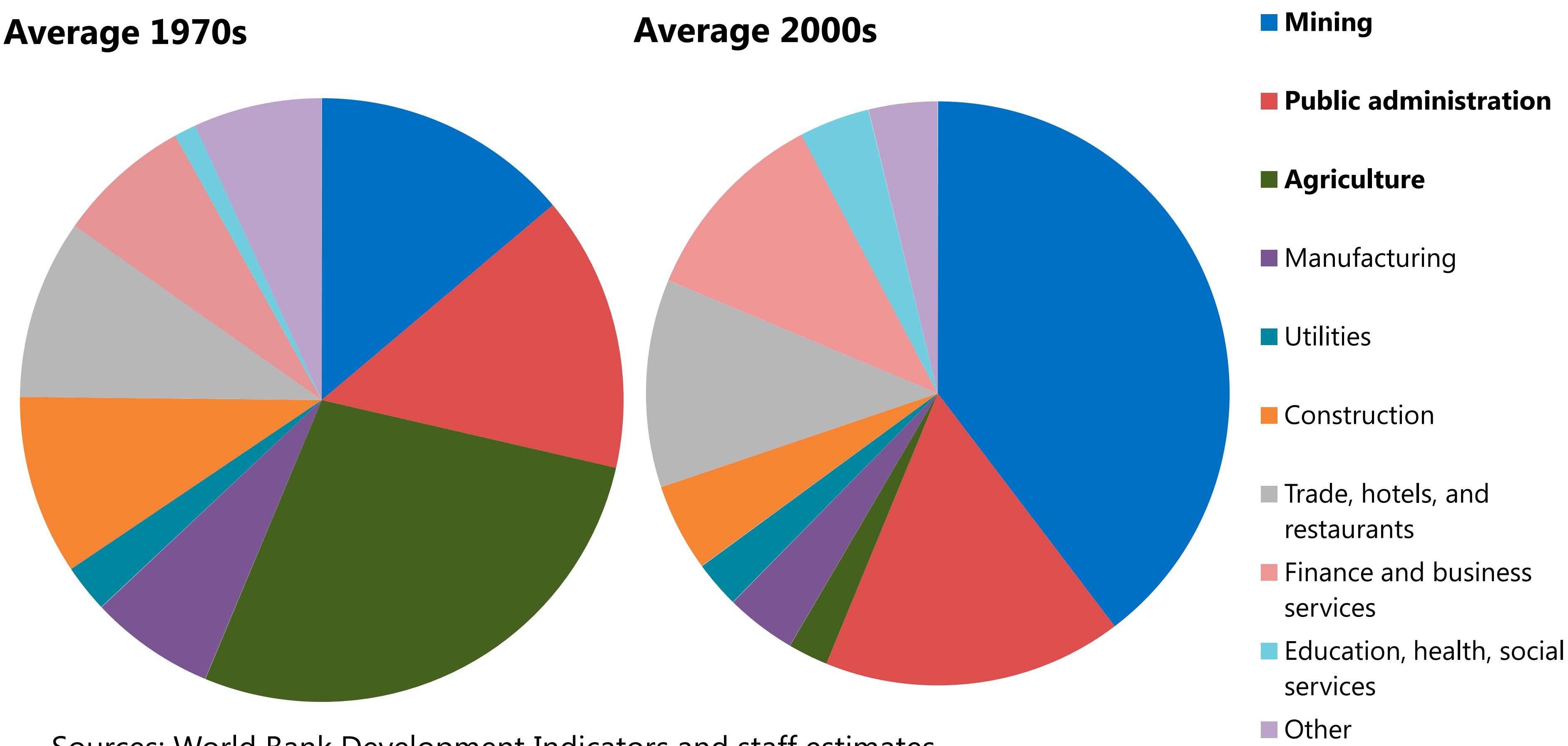
Botswana:
Political Stability, Good Institutions, and Prudent Macroeconomic Management

- Cautious fiscal policies
  - Accumulation of international reserves, supported by fiscal surpluses
  - Heavy spending on infrastructure and human capital
- FDI openness, pro-market policies, and partnership with foreign mining companies
- Openness to trade and no foreign exchange controls
- Exchange rate stability and moderate inflation
- Low corruption
  - 32^{th} of 182 countries by Transparency International

Botswana:

From Dependence on Agriculture to Dependence on Mining and Government

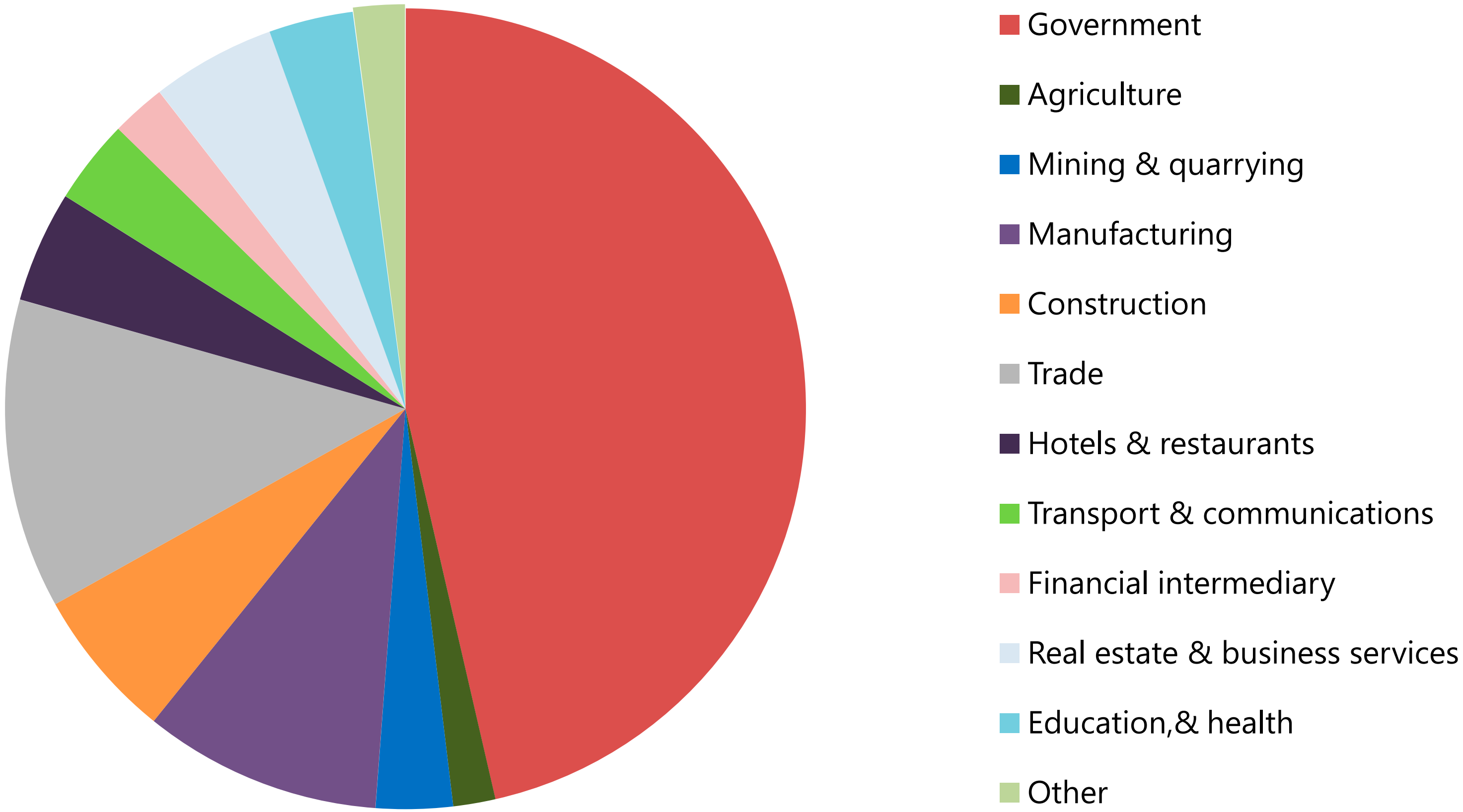
Distribution of GDP by kind of economic activity



Sources: World Bank Development Indicators and staff estimates.

Botswana:

Formal Sector Employment Concentrated in Government



Source: Botswana Central Statistical Office.

Botswana:

Lack of Diversification: Not Because of a Lack of Policy Efforts

- State owned enterprises, financial assistance programs, and tax incentives, but
  - Limited employment creation, fraud and abuse
  - Widespread failure among small-scale projects
  - Many medium and large-scale companies could not sustain themselves beyond the five-year assistance period
  - Complex incentive regime, a low effective tax rate on capital, and a narrow tax base

Lack of diversification and poverty reduction success:
Tax Regime and Labor Market Policies an Issue?

- Skills mismatch and low labor productivity
  - Shortages of skilled workers
    - High wage increases since liberalization in 91
    - Private sector import key skills from abroad
- Minimum wage regulations and high government wages at the lower end
  - Pushing up the reservation wage
  - Hamper formal sector employment

❖ "Botswana is suffering from the Dutch disease through an overvalued currency and high wages" (Derek Hudson, former Director of Botswana's central statistical office and former Deputy Director of Bank of Botswana)

Botswana:
Failure to Diversify

- Growth strategy based on capital deepening and centered on public spending
  - Tax incentives resulted in low effective capital tax rates

- This strategy may not be optimal for a country with abundance of low-skilled labor

Chile:

Export Growth and Diversification

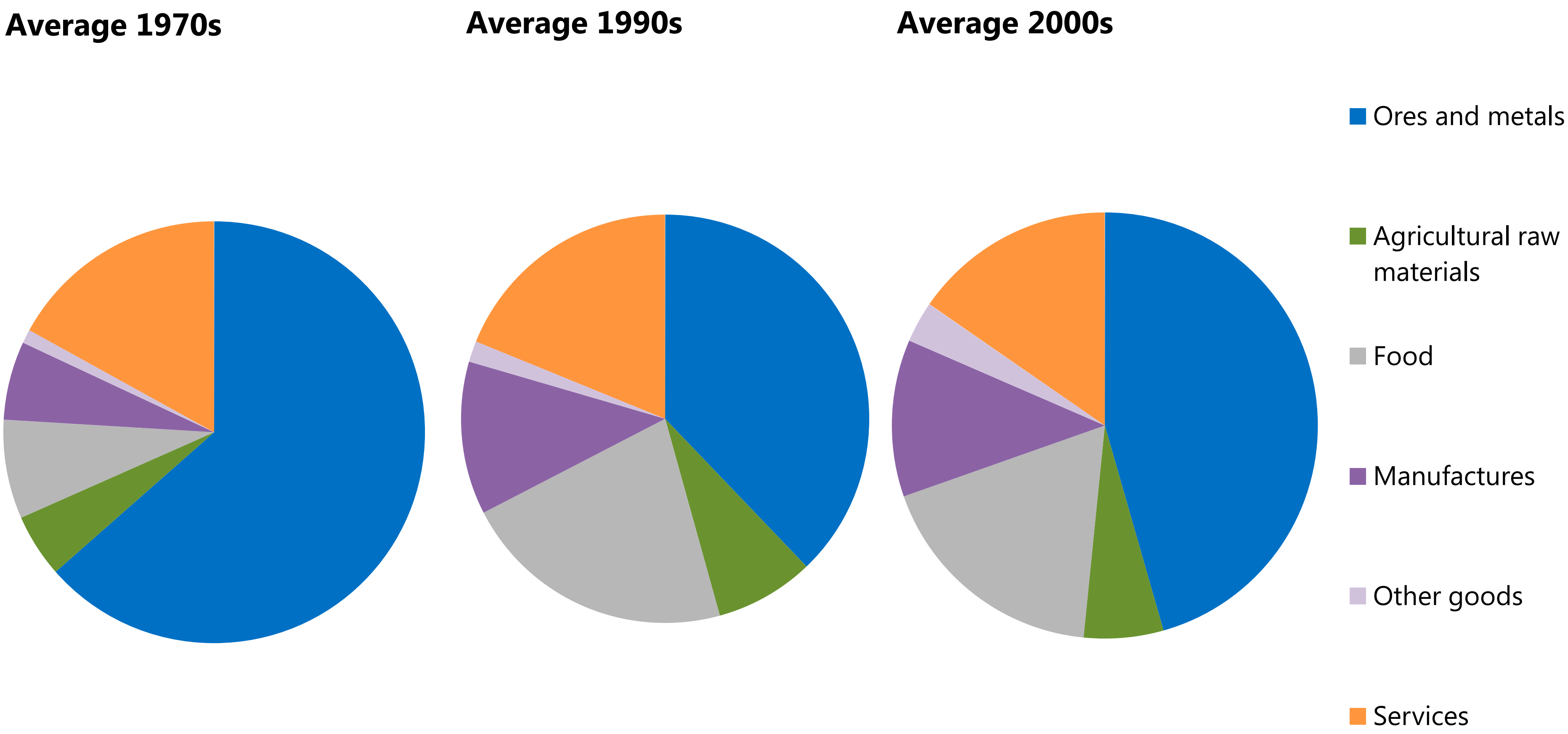
- Exports soared
  - 12 percent of GDP in the 10-years before 1973
  - 40 percent of GDP on average in 2000-10
- Exports become more diversified
  - 1970s: Copper 64% of total goods and service exports
  - 1990s: Copper 38% of total
  - 2000s: Copper 46% of total
    - Tourism, agricultural products, resource-based (wood) manufacturing

❖ Comparative advantage: natural resources

Chile:

Diversifying Out of Copper Dependency

Distribution of exports



Sources: World Bank Development Indicators and staff estimates.

Chile:

Policy Framework

- Planning, institutional strength, low corruption
- Exchange rate management
  - To slow appreciation and boost exports
    - Taxes on short-term capital inflows
  - Fully floating and inflation targeting since 1999
- Market support policies
  - Macroeconomic stability
  - Fiscal discipline and fiscal policy rules
    - Copper Stabilization Fund in 1985
    - Fiscal surpluses, rapidly reduced government debt
    - Spending tilted towards growth
      - (public investment, education, and health)
  - Privatization, trade liberalization, financial sector reforms
    - De Gregorio (2004): the unilateral opening of the Chilean economy was one of the most important reforms undertaken in the 1970s and 1980s

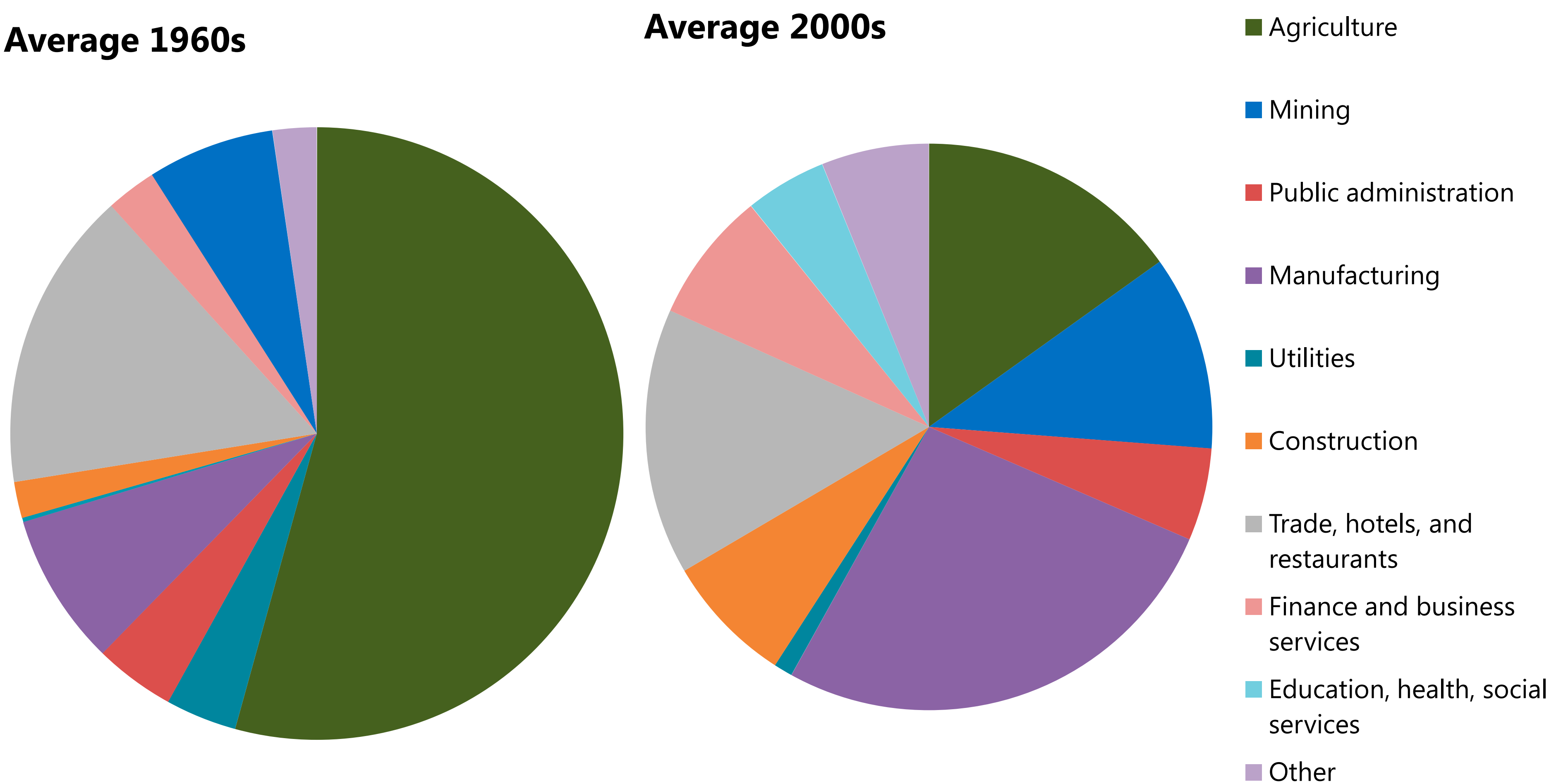
Chile:

Policy Framework

- Active industrial policy
  - Export support schemes
    - Financing facilities
    - Institutional support
      - Encouraging technical development and adaptation
      - Providing infrastructure and information, incl. on standards
      - Coordinating small producers
  - Technology transfer
    - State owned mining company’s subcontracting to local firms used as a tool to diffuse technology and skills
- Labor market reforms
  - Deregulations and decentralized wage negotiation

Indonesia:
Economic Diversification

Distribution of GDP by kind of economic activity



Sources: World Bank Development Indicators and staff estimates.

Indonesia:
Pro-Poor Growth Success

- Macroeconomic stability, fiscal discipline, exchange rate management, trade liberalization, financial sector
  - Strong economic policy institutions
- **Low-wage manufacturing and exports**
  - Export surge caused the labor market to tighten and wages ultimately to increase
- **Labor-intensive infrastructure and rural development**
  - Schools, farm-to-market roads, and irrigation and water
- **Agriculture policies**
  - Input subsidies, and **low** and stable rice prices

Indonesia:
Empowering Poor Household to Enter the Market Economy

- Lower transaction costs
  - Easier access to the markets
- Health and education
  - Improved capabilities to connect to the market economy
- Predictable agriculture policy
  - Less risky to trade in farm products
- Stimulating informal sector and rural demand
  - Input subsidies and low farm gate prices important
  - Informal sector output demand driven
  - A “ladder” towards modern high wage jobs

Conclusions

Critical factors

- Political stability, institutions, and economic governance
- Openness to trade and foreign direct investments
- Avoidance of an overvalued and excessively volatile exchange rate
- Prudent macro-economic policy
  - Low and stable inflation
  - Contain fiscal spending to avoid an overvalued exchange rate and high domestic interest rates
- Government expenditures geared towards promoting investment, education, and health spending.
- Tap existing comparative advantages and develop new ones

Tapping Existing Comparative Advantages and Developing New Advantages

- Indonesia: agriculture, labor-intensive infrastructure and rural development strategy
  - Comparative advantage—abundance of low-skilled under-employed workers
- Chile: natural resource based export diversification
  - Comparative advantage: natural resources
  - Disadvantage—small domestic market and high transport costs to major international markets

- Value addition of dominant export commodity?
  - Being a producer of a raw material doesn't imply a comparative advantage in processing it
    - May not be best use of scare resources (capital, skilled workers)
  - Focusing on capital and skill-intensive downstream activities may increase crowding out of labor-intensive production

Get the price and incentive structure right

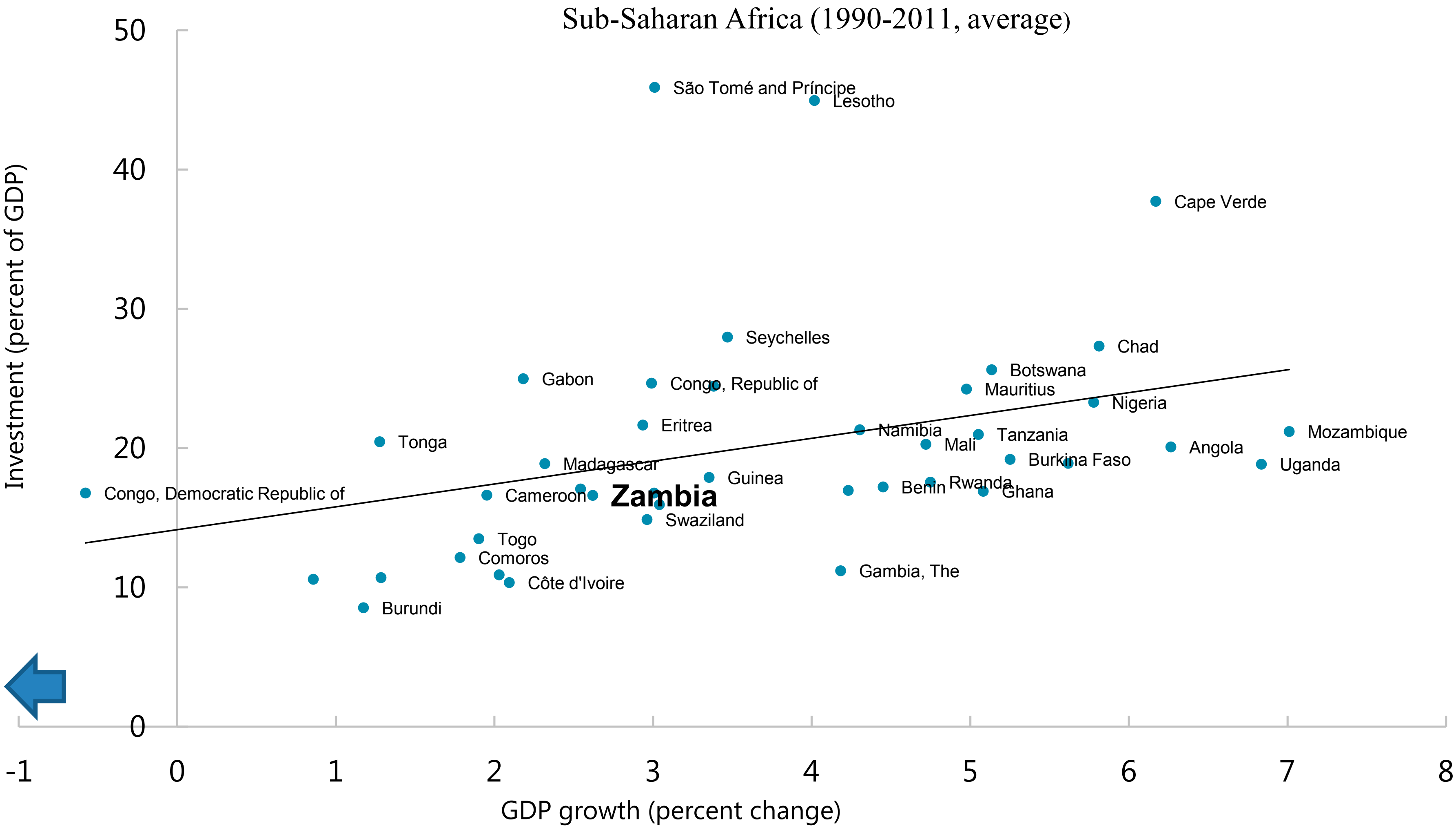
- Countries with an abundance of low-skilled labor need to encourage labor-intensive growth
  - Mining is capital intensive and will not be the main employer
- Tax and labor market policies
  - Tax capital and consumption, not formal sector wages
  - Keep labor internationally competitive
    - Keep wage increases in line with productivity growth
    - Avoid excessive direct and indirect costs of hiring workers on formal contracts

Industrial Policy?

- Controversial
  - Chile: played a role
  - Botswana: ineffective
  - Indonesia: led to corruption and crony capitalism

Additional Material

Investment and GDP Growth



Source: World Economic Outlook.

Botswana:

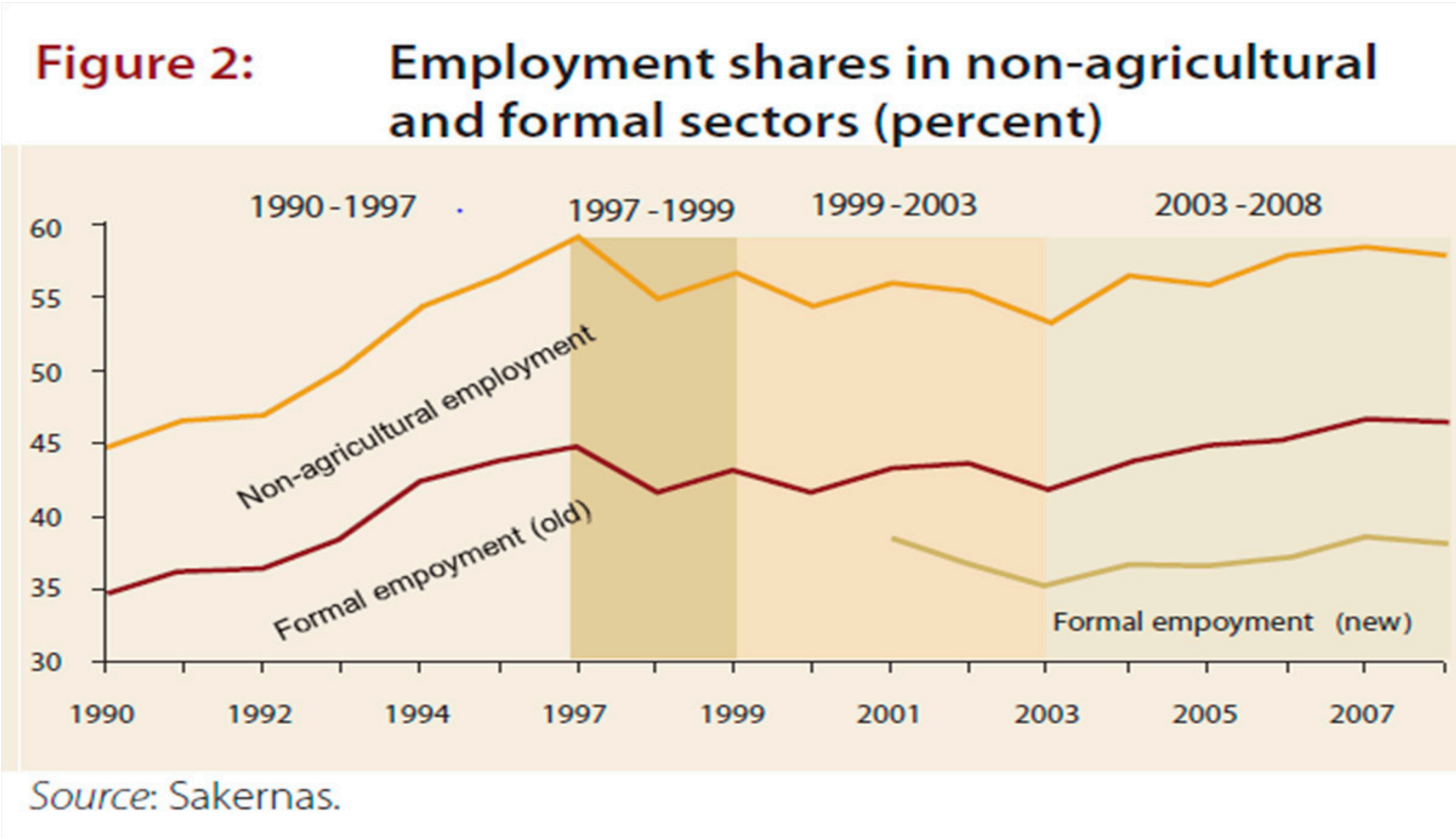
Poverty Record

- National poverty line headcount:
  - 1985: 59% Rural: 68%, Urban 30%
  - 1992: 33% Rural: 40.4%, Urban 24.7%
  - 2003: 30% Rural: 44.8%, Urban villages: 25.4, Cities:10.6%
  - 2010: 20.7% Rural: 25.5%, Urban villages: 18.8%, Cities:14.%
- Below $1.25
  - 2003: 23.4% Rural 36%, Urban villages: 19%, Cities:5%
  - 2010: 6.5% Rural 8.3%, Urban villages: 6.1%, Cities:3.3%

- Why so high in 1985-92 after 20+ years of high growth and when income had reached a relatively high level?

- What caused the sharp decline from 2003-10?
  - Expansion of social programs?
    - Not known. Required detailed data not yet released

Indonesia Formal Sector Employment



- Stagnant formal sector employment last decade due to excessive minimum wage increases, excessive regulations, and populist policies?

Digression: Pro-Poor Policy

Input Subsidies and Farm Gate Prices

- Input subsidy: Triple poverty effect—income transfer, increased output and income generation, and reduced local food prices
    - Most small-scale farmers net purchasers of rice and thus benefits from lower output prices
    - But **targeting is a challenge**
- Why is there a need for subsidies if its profitable to increase fertilizer use?
    - New research: Poor farmers will buy fertilizer at market price if sold to them at the time of the harvest when they have cash
    - Easy access and private sector distribution networks that reaches the areas where the smallholders lives are important