REBOOTING PRODUCTIVITY FOR RESILIENT GROWTH

Country Private Sector Diagnostic for Thailand

February 2022
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The World Bank Group’s Thailand Country Private Sector Diagnostic (CPSD) builds on work addressing this question:

**How Thailand can reach its goal for becoming a high-income economy?**

- The focus is on the potential of the private sector to contribute to this vision of growth.

- Growth is priority given the impact of the COVID-19 pandemic on the economy. In 2020, GDP contracted by 6.1 percent, one of the largest drops in the EAP region.
Thailand’s growth trajectory

Until the early 2000’s, Thailand’s economic growth was led by an export-growth model, fueled by productivity growth, and supported by overall macro stability and progressive reforms.

However, growth has stalled since then; owing to stalled productivity and innovation, and declining private investment and export intensity.

Further, this growth trajectory has neither been inclusive nor sustainable, reflected in growing inequality between regions and firms & lagging performance on key environmental indicators.

COVID-19 has dealt a further blow to the economy, leading to a 6 percent contraction in growth in 2020, the most severe in decades. This has led to reversal of gains in poverty and increase in unemployment.

A challenge but also an opportunity to ‘rebuild’ by leaning on new levers of growth and accelerating the structural reforms needed to fast track the economy.
Two levers that could leverage global trends

Adoption of Digital & Disruptive Technology and Circular Economy could stimulate innovation and leverage key global trends

### Trends
- The rise of automation and services as a necessary complement to the success of manufacturing is challenging manufacturing models that rely on low-wages.
- The shifting nature of GVCs could result in greater regionalization of more complex Value chains; changing patterns of trade in services—from face-to-face to digital platforms.
- Climate change is producing extreme weather conditions, notably floods and droughts, increasing disaster risks and reducing living standards.
- Population’s rapid aging is reducing labor-force participation and reinforcing occupational and skills shortages.

### Opportunities for Thailand
- Leverage existing manufacturing base to update GVC Participation through production of more complex products and greater linkages to services.
- Accelerate adoption of digital solutions that leverages relatively strong digital infrastructure.
- Accelerate ongoing initiatives to address sustainability (e.g., marine plastics and recycling) and adopt broader solutions such as the circular economy.
- Upskill/reskill aging population.

### Using the Two Levers
- DDT reinforces the use of technology. Success of many circular approaches comes from use of new technology.
- DDT can reduce export barriers of costs and distance, expand markets, CE can provide solutions for changing demand for sustainable products, move to ‘greener’ GVCs.
- DDT can support sustainable production of goods & services (e.g. biodegradable plastics). CE can decouple growth from GHG emissions/ virgin resource extraction.
- DDT can address impacts of aging by solutions such as telehealth. CE can help address increased demand of larger population with goods using less resources.

### Risks to Opportunities
- Lack of skills for the future and significant skills mismatch, Inadequate innovative financing, Restrictions on the service economy, especially FDI, Stifled competition for SMEs, Continuing gaps in the business environment
The rate of firm entry and exit, a key determinant of productivity growth, is low for a country at Thailand’s income level.

New business density among selected countries in 2018
New registrations per 1,000 people ages 15-64

<table>
<thead>
<tr>
<th>Country</th>
<th>Private Sector Diagnostic for Thailand (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td>10.3</td>
</tr>
<tr>
<td>South Africa</td>
<td>10.2</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>4.4</td>
</tr>
<tr>
<td>Malaysia</td>
<td>2.4</td>
</tr>
<tr>
<td>Columbia</td>
<td>2.0</td>
</tr>
<tr>
<td>Poland</td>
<td>1.4</td>
</tr>
<tr>
<td>Thailand</td>
<td>1.1</td>
</tr>
<tr>
<td>Mexico</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Source: WDI, Thailand Economic Monitor, January 2020
Technology adoption rates and the prevalence of innovation have been disappointing in recent years. Thailand’s results from investments in “knowledge capital” also remains modest in comparison.

SELECTED METRICS FOR R&D-BASED INNOVATION

<table>
<thead>
<tr>
<th>Country</th>
<th>Private Sector Diagnostic for Thailand</th>
<th>Rebooting Productivity for Resilient Growth</th>
</tr>
</thead>
</table>

SELECTED INNOVATION RESULTS, 2018

Sources: UNESCO, European Commissions, Media reports, OECD (left); World Development Indicators (right)
Thailand’s participation in global innovator services has been below expectations for its level of income.

Thailand is also highly dependent on tourism for service exports, but those which have relatively few linkages and diversification prospects compared to other service subsectors.

Source: Nayyar, Gaurav, Mary Hallward-Driemeier, and Elwyn Davies. 2021
Opportunities for Driving Growth
Lever 1: Accelerate Adoption of Digital and Disruptive Technologies

Based on an analysis of regional risk capital funding flows to digital startups, the CPSD analysis estimates an opportunity of about USD 1.8 billion.

Thailand’s funding gap/potential in key digital business industries relative to Asian peers

<table>
<thead>
<tr>
<th>Focus of Thailand’s Strategy</th>
<th>Thailand’s Annual Funding Gap or Surplus Relative to Asian Frontier Markets (in USD mio)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keep growing and scale</td>
<td>E-Commerce: -354, FinTech: -276</td>
</tr>
<tr>
<td>Scale and lead</td>
<td>FoodTech: 24, TravelTech: 167</td>
</tr>
</tbody>
</table>

Note: The estimates compare Thailand’s current investment flows with its potential flows if Thailand were to attract the same amount of funding in these sectors as the Asian frontier markets do (adjusted for the size of their economies, that is, by GDP). Details about the methodology can be found in the Technical Appendix of the CPSD.

Lever 2: Adoption of Circular Economy Approaches

• The Circular Economy, or Circularity: replacing the traditional take-make-waste economy with one based on reusing renewable natural capital and keeping materials and products in use for as long as possible.

• Based on quantification of value creation/cost saving potential through adoption of CE models, the CPSD analysis estimates potential opportunity worth USD 1.6 billion in three areas of food & agriculture, construction and electrical & electronic appliance sectors.

Source: Accenture (left). WBG Staff estimates (right).
Constraints
Limited competition and an uneven playing field constrain the emergence of an innovative private sector.

- Increasing concentration of ownership led to increased market power through mark ups, especially in network sectors.
- Market-Based Competition, competition law and enforcement present limitations.

Business activity is perceived to be dominated by relatively few players.

**EXTENT OF MARKET DOMINANCE, 1-7 (BEST)**

**Market-based competition and competition law and enforcement are perceived as limited**

Source: Bertelsmann Stiftung’s Transformation Index BTI, 2020(left); World Economic Forum’s Global Competitiveness Report (right)
Restrictions to FDI further reduce competition and stall potential benefits of knowledge and innovation spillovers

• Entry and operational restrictiveness are factors driving the shrinking of FDI, especially in the service sector.

• FDI liberalization has stalled over the last 20 years, while regional competitors have opened their markets.

• An incomplete regulatory regime, capacity challenges, and the slow pace of reforms fuel these restrictions.

The Thai FDI regulatory restrictiveness index change over time (1 = more restrictive; 0 = less restrictive)

Source: OECD 2020
Expanded access to innovation financing can enable firms to adopt new business models and technology.

- Private access to credit remains robust, but MSMEs remain underserved by the formal financial sector.
- Venture capital (VC) funding, a key source of innovation finance, is only 0.03 percent of GDP – which is low compared to regional peers.

### Access to finance between Thailand and selected comparators

**Percentage of respondents**

<table>
<thead>
<tr>
<th>Country</th>
<th>% of firms with a bank loan/line of credit</th>
<th>% of loan rejection</th>
<th>% of firms using bank to finance investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thailand</td>
<td>Thailand</td>
<td>EAP</td>
<td>Global benchmark</td>
</tr>
</tbody>
</table>

### Size of venture capital funding in Southeast Asia

**VC funding ($bn) in 2019**

- Singapore: 6.70
- Indonesia: 2.67
- Vietnam: 0.99
- Malaysia: 0.23
- Philippines: 0.26
- Thailand: 0.13

**Source:** World Bank Enterprise Survey, 2016 (left); SEA venture capital landscape 2020, White Star Capital (right)
Expanded access to the workforce skills of the future can help Thailand meet its aspirations

- Thailand is behind comparator countries in its share of high-skilled workers in the region.
- Firms suffer from the unavailability of relevant skills, both technical and non-cognitive, and of the unsatisfactory performance of new hires.

Source: ILOstat (left); World Bank Linkedin Data for Development (right)
Recommendations
Recommendations for competition

**Improve competition law enforcement**

- Strengthen enforcement and advocacy by Trade Competition Commission Thailand (TCCT), build TCCT capacity and publish of guidelines for competition enforcement.
- Strengthen governance of the TCCT
- Bridge existing gaps in the Competition Act with support from the TCCT and the Ministry of Commerce.

**Eliminate competition distortions**

- Elevate the competition policy agenda as an economic policy issue through representation of executive and higher office, with support from the Office of the Prime Minister.
- Conduct a review of potential opportunities to eliminate competition distortions using the competitive neutrality framework, with support from the Ministry of Finance, TCCT and Sector Regulators.

**Ease processes/restrictions to hiring expatriate staff/foreign experts**

- Make the SMART visa program fully digital
- Review staff and capital ratios with a view to adopting a sector-specific approach

These recommendations will require support from the Board of Investment (BOI), Immigration Bureau, Ministry of Labour, Ministry of Foreign Affairs and Electronic Transactions Development Agency (ETDA).
Recommendations for foreign direct investment (FDI)

Ease restrictive FDI regimes, especially in services sectors

- Further liberalize services sectors that are key for achieving the goals of Thailand 4.0
- Reduce the number of service sectors that require a Foreign Business License (FBL)
- Remove the broad “Other service businesses” provision under List 3 of the FBA, and add the clarification that “everything not on the list is permitted without restriction”.
- Adopt a tailored, sector-specific approach to establish minimum capital requirements for FDI.
- Consider dispensing with the 25% of operating expense requirement for activities under List 2 and 3 of the FBA.
- Consolidate FDI restrictions in the sectoral legislation under the FBA

These recommendations will require support from the Ministry of Commerce, Board of Investments, Office of The National Broadcasting and Telecommunication Commission, Council of Ministers, and the National Assembly.
Recommendations for access to finance for innovation

- **Increase provider diversity, innovation, and reach**
  - Strengthen regulation to address risk to investors in crowdfunding platforms.

- **Strengthen financial infrastructure**
  - Develop an approach to open banking starting with API standards for data sharing, and a cross-industry approach to standards to promote competition.
  - Establish a single, unified Secured Transaction (ST) Act.
  - Establish a single, central, and real-time registry fully interfaced with financial institutions.

- **Increase SME access**
  - Ensure effective implementation of a digital-factoring initiative to promote supply-chain financing and enable SME access to key value chains.

These recommendations will require support from the Securities and Exchange Commission (SEC), Bank of Thailand (BOT), Ministry of Finance (MOF), Depart of Business Development (DBD) and the Office of SME Promotion (OSMEP).
Recommendations for skills for the future

Correct the skills mismatch

- Introduce a skill-monitoring system to address skill shortages
- Include private sector perspective in curriculum design

Increase efficiency in the TVET system

- Reduce burden on the private sector to participate in the system by streamlining procedures of accessing incentives and reporting
- Establish an intermediary agency to oversee the TVET system institutions under a quality-assurance mechanism

Address falling labor force participation

- Explore introducing reskilling programs for the aging labor force
- Explore regulations that increase female labor force participation – increase the number of child development centers, improve benefits for motherhood and for caring for the elderly

These recommendations will require support from the Ministry of Education (MOE); Ministry of Higher Education, Science, Research and Innovation (MHESI); Office of National Higher Education Science Research and Innovation Policy Council (NXPO); Office of the Vocational Education Commission (OVEC); Board of Investment (BOI); Ministry of Labour (MOL); and the Ministry of Social Development and Human Security (MSDHS), along with the private sector.
Digitization and disruptive technologies recommendations

- Enhance institutional roles and responsibilities in key digitization policies
  
  This recommendation will require support from the Ministry of Digital Economy and Society (MDES) and sectoral ministries.

- Overcome lag in experimenting disruptive tech pilots by establishing a monitoring and evaluation framework to track progress of key programs and reforms

  This recommendation will require support from the Ministry of Commerce (MOC) and the Securities Exchange Commission (SEC).
Digitization and disruptive technologies recommendations (continued)

**Improve the regulatory environment for digitization**

- Consider financial regulations aligned with international standards by introducing Employee Stock Option Plans (ESOPs) and issuing convertible notes and preferred shares
- Introduce industrial data strategy and protection policies to enable and safeguard data-intense solutions
- Enhance the use of equity funds (beyond PE trusts) to de-risk investments and catalyze the early-stage capital market.

**Increase contestability in digital markets**

- Attract additional regional financial venture capital to balance the role of CVC in the digital ecosystem
- Intensify international competition to promote an open and innovation-driven economy
- Introduce online supplier protections schemes to prevent online platforms from abusing their market power
- Create trust and fairness in the digital market to drive broad-based digital uptake
- Address lack of competition on how spectrum is assigned.

These recommendations will require support from the Ministry of Commerce (MOC), Securities Exchange Commission (SEC), Ministry of Digital Economy and Society (MDES), Digital Economy Promotion Agency (DEPA), National Innovation Agency (NIA), National Science and Technology Development Agency (NSTDA) and Electronic Transactions Development Agency (ETDA), National Assembly (NA), Council of Ministers (COM) and Office of Trade Competition Commission (OTCC).
Digitization and disruptive technologies recommendations

(continued)

Increase the pipeline of tech talent to drive digital transformation

- Build deep-tech capabilities, and change mindset and culture to make tech a promising career path
- Promote and provide incentives for local-international tech talent exchange via incubators, accelerators, diaspora networks, and corporate overseas exchange.

These recommendations will require support from the Digital Economy Promotion Agency (DEPA) and National Science and Technology Development Agency (NSTDA), along with the private sector and academia.
Circular economy recommendations

**Increase knowledge and understanding of the circular economy**

- Introduce a standard national definition of the circular economy, in line with international frameworks, to be adopted in the new Circular Economy Action Plan being drafted.
- Implement awareness programs for correct use of circular economy concepts through imbedding core modules in university and business transformation guides, and case studies for private sector.
- Expand the monitoring and evaluation framework to cover broader list of indicators, with sector-specific indicators.

*These recommendations will require support from Office of the Prime Minister, Office of National Higher Education Science Research and Innovation Policy Council (NXPO), Ministry of Interior (MOI), and Ministry of Natural Resources and Environment (MNRE), along with sectoral ministries, NGOs, businesses and consumers.*

**Address institutional fragmentation for design and implementation of circular economy policy**

- Strengthen the public-private mechanism under the Bio-Circular-Green (BCG) Committee
- Appoint a central circular economy agency or organization to create, implement and enforce circular economy policy, and to coordinate inter-ministerial action.

*These recommendations will require support from the Office of the Prime Minister and the Office of National Higher Education Science Research and Innovation Policy Council (NXPO), along with the proposed newly created coordinating agency.*
Circular economy recommendations (continued)

Develop a comprehensive and cohesive policy framework to include:

- Use of recycled plastics for food containers
- Specifications related to recycled content in aggregate and other building materials
- Material intensity conflicts with seismic building requirements.
- Accelerate incentives for R&D based/adaptation for circular economy innovation
- Introduce and expand incentives for non-R&D based innovation and diffuse circular economy technology.

These recommendations will require support from the Office of National Higher Education Science Research and Innovation Policy Council (NXPO), sectoral ministries, MOF, private sector and academician, along with the proposed newly created coordinating agency.

Increase supportive infrastructure to implement circular-economy opportunities

- Invest in enabling physical and digital infrastructure, and the business case to support adopting circular business models.

This recommendation will require support from the Ministry of Natural Resources and Environment (MNRE), Ministry of Transport (MOT) and Ministry of Digital Economy and Society (MDES), along with the proposed newly created coordinating agency.
Conclusion
Conclusion

The recommendations set out a way forward in addressing the existing investment constraints with the goal of enabling an innovation and knowledge-led growth model. Reforms are urgently needed to allow the private sector to participate in “Rebooting Productivity for Resilient Growth” that will allow Thailand to reach high-income status.

Success will depend on the support and cooperation in working with the private sector from government ministries and departments across multiple sectors, financial institutions, and academia and experts in fields related to the digital and disruptive technologies and the circular economy to create high quality jobs, increase female labor participation, develop innovative markets and generate sustainable growth.
Annex
The factors that contributed to Thailand’s high economic growth in the past are unlikely to yield similar dividends today

- In rising to middle-income status, the country relied on exports and low labor costs. Thailand’s growth diminished due to a contraction in productivity.
- Private investment declined from more than 40 percent in 1997 to 16.9 percent of GDP in 2019.
Signs of stalling competitiveness can be seen in reduced export intensity and stalled participation in global value chains

SELECTED EXPORT PERFORMANCE METRICS IN THAILAND VS. PEERS

Technology intensity in exports in 2017, 2018

<table>
<thead>
<tr>
<th>Country</th>
<th>High-technology exports in 2017, % of manufactured exports</th>
<th>ICT service exports in 2017, % of service exports, BoP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaysia</td>
<td>52.8</td>
<td>7.2</td>
</tr>
<tr>
<td>Thailand</td>
<td>23.3</td>
<td>0.6</td>
</tr>
<tr>
<td>Mexico</td>
<td>21.1</td>
<td>0.3</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>19.6</td>
<td>14.0</td>
</tr>
<tr>
<td>Poland</td>
<td>10.6</td>
<td>10.9</td>
</tr>
<tr>
<td>Colombia</td>
<td>7.3</td>
<td>4.1</td>
</tr>
<tr>
<td>South Africa</td>
<td>5.3</td>
<td>4.2</td>
</tr>
<tr>
<td>Chile</td>
<td>6.4</td>
<td>3.4</td>
</tr>
</tbody>
</table>

Source: WDI, World Bank Staff estimates.