

7. TRANSPORT

MAKING TRANSPORTATION MORE RELIABLE AND AFFORDABLE



A young and dynamic entrepreneur, Guillaume, owns a truck and transports cereals for rural smallholder farmers to nearby markets. He is committed to provide reliable services to his clients by keeping his truck in good condition. He has the required truck-level transport license presenting his technical inspection and insurance certificates. But he finds it hard to expand his business with all the competition from formal and informal operators offering transport services below minimum quality and safety standards. As a certified driver and licensed truck operator, Guillaume would like his customers to be able to distinguish professional truckers ensuring certain standards from informal competitors. The government is aware of the situation and is working on improving the current licensing system to establish certain professional minimum standards.

EBA transport indicators measure laws and regulations that affect commercial road transport services. The indicators address factors that could potentially benefit farmers and agribusinesses through more competitive and better regulated services that enable the transport of agricultural products to the market.

With growing demand for food and increasing export opportunities in regional trade, farmers will need to transport their produce to these markets to benefit from their potential. High transport costs increase the price farmers pay for inputs and decrease their income, which decreases the incentive to invest in their farms.¹ Regulations affect the availability, efficiency, effectiveness, reliability and safety of transport services.²

Truck licenses, the first indicator for *EBA* transport, has been selected for study as licenses promote reliable and safe transport services. Truck licenses create a level playing field for road transport operators by regulating access to the profession and setting safety and environmental standards. Countries with few or no qualitative market entry criteria are dominated by many small, often informal businesses. Informality hampers the viability and efficiency of

formal road transport services, cutting the revenue collected from the transport sector. Smart regulations balance the need for safety and quality standards without becoming too burdensome and excessively restricting small and foreign companies in the market. The process for obtaining licenses or permits for transport equipment and operations should be clear, transparent and efficient. Making it easier to obtain licenses for transport equipment and operations is an important way to improve trade and transport.³

Cross-border transport, the second indicator for *EBA* transport, measures restrictions to foreign transport companies providing cross-border services. Permit and quota restrictions obstruct regional trade integration.⁴ Increasing foreign participation in trucking and logistics is one way to improve the quality and competitiveness of transport services available to agribusinesses. Allowing foreign logistics services and foreign trucks to transport third-country cargo eases trade.⁵ Backhauls and long travel times from waiting and idling during trips create inefficiencies that also raise transport prices.⁶ Harmonizing and mutually recognizing technical and procedural standards between countries—such as axle load limits, technical inspections and

carrier liabilities—improves cross-border transport service quality and efficiency.

The data cover the following areas:

- **Truck licenses.** This indicator addresses the different licensing regimes for commercial road transport services in the domestic market, the extent to which license requirements and applications are available online, the additional legal requirements to obtain a license or permit and the price and freight allocation regulations affecting domestic road transport services. In addition, data has been collected on the time, cost and validity required for transport licenses and the cost and validity of mandatory technical inspections.
- **Cross-border transport.** This indicator measures restrictions to cross-border transport including the regulation of carrier's liabilities, rights of foreign trucking companies to transport agricultural goods in the country, and existence of quotas on number of transport rights granted.

Countries such as Denmark, Greece, Poland and Spain score better than most

on both transport indicators, with regulations in place that lead to a more favorable enabling regulatory environments for transport operators (figure 7.1). They have transparent regulations and neither impose discriminatory criteria to obtain a license nor interfere with freight allocation and price setting—making it easier for foreign transport operators to enter and operate in the domestic market.

Countries that score poorly often struggle with the trade-off between the need for a more formal and professional sector and the availability of administrative and institutional resources. Transport regulators seek to promote the sector's professionalization by establishing quality standards and other requirements for obtaining a license. But limited enforcement and institutional capacity hinders progress. Low-income countries tend to have regulations with lower quality standards for operator licenses and more price-setting and freight allocation mechanisms, hurting their transport indicator scores. But some low-income countries perform better than

others—especially in cross border transport. For example, Kenya and Uganda are more open to foreign competition than Cambodia and Ethiopia.

Low-income countries have weaker regulations for cross-border transportation because they often grant fewer transport rights to trucking companies from their main neighboring trading partner, limiting foreign transport operators in the domestic market. But some countries are leveraging regional integration to gradually harmonize regional transport regulations and ease cross-border trade. Although Tanzania's transport license regulations restrict foreign transport operators, they allow transport companies from other East African Community (EAC) countries to offer more services.

Company road transport licensing promotes better transport operations

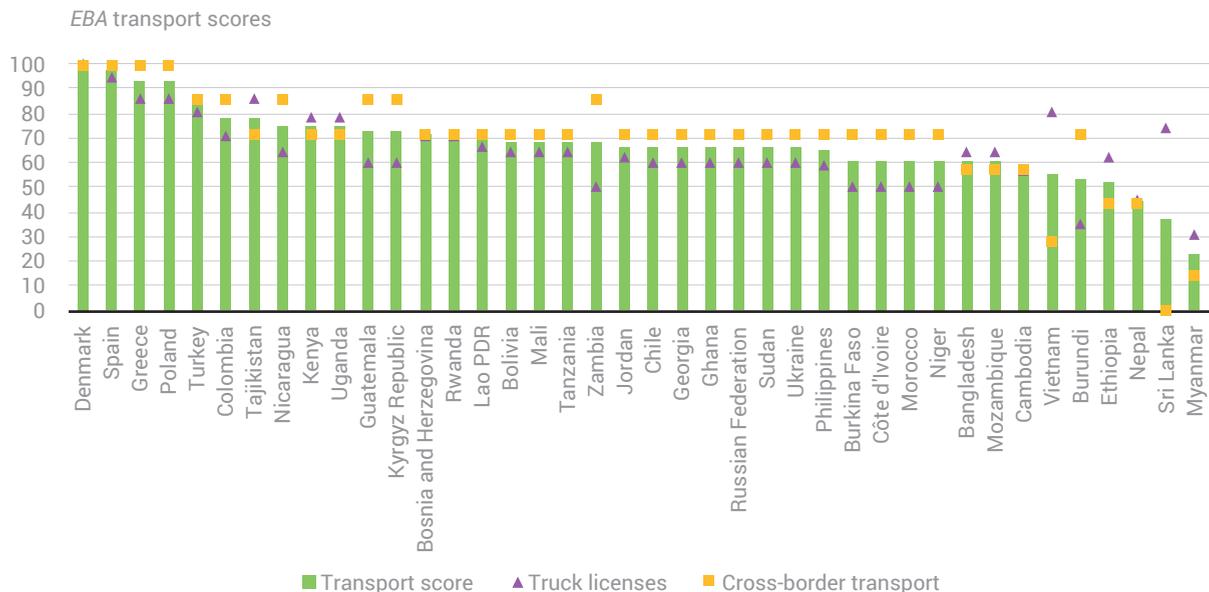
Introducing and enforcing quality criteria to enter the transport sector

should be a key objective of any transport regulation.⁷ Regulation affects the competition and efficiency of transport services, as well as their availability, reliability and safety.⁸ Competition improves service quality and lowers transport prices,⁹ but imperfect competition accounts for 35% of national transport costs in Central America.¹⁰ Lower prices and reliable services increase the profit margin for farmers, which they can reinvest in other production-related activities.

Company licenses promote more formal and professional transport sectors by regulating access to the profession, setting standards for transport operations, collecting revenue based on business profits, compiling more detailed data on the trucking industry and facilitating the enforcement of labor regulations (box 7.1).

They provide a level playing field to promote competition based on common criteria. They also ease establishing and enforcing certain minimum

FIGURE 7.1 High-income countries tend to have more regulations that promote market access and operations and cross-border transport



Source: EBA database.

Note: The EBA transport aggregate ranking is constructed by combining two subindicators: truck licenses and cross-border transport.

BOX 7.1 Good practices for road transport licensing systems

- Should require licenses to access the sector and provide truck services to establish minimum conditions and requirements such as technical inspection certificates.
- Should not include discriminatory requirements for licenses, such as nationality, membership in a trucking organization and minimum operational capacity.
- Should establish quality criteria such as good repute, financial standing and professional competence to obtain a transport license, preferably by implementing a company-level license.
- Should make licensing requirements transparent and accessible and collect and update road transport data.
- Should promote market-based price-setting mechanisms and freight allocation systems.

Of the 40 countries measured, 12 require a company license only, 16 require a truck license only, 4 require both company and truck licenses and 8 require no company or truck licenses.

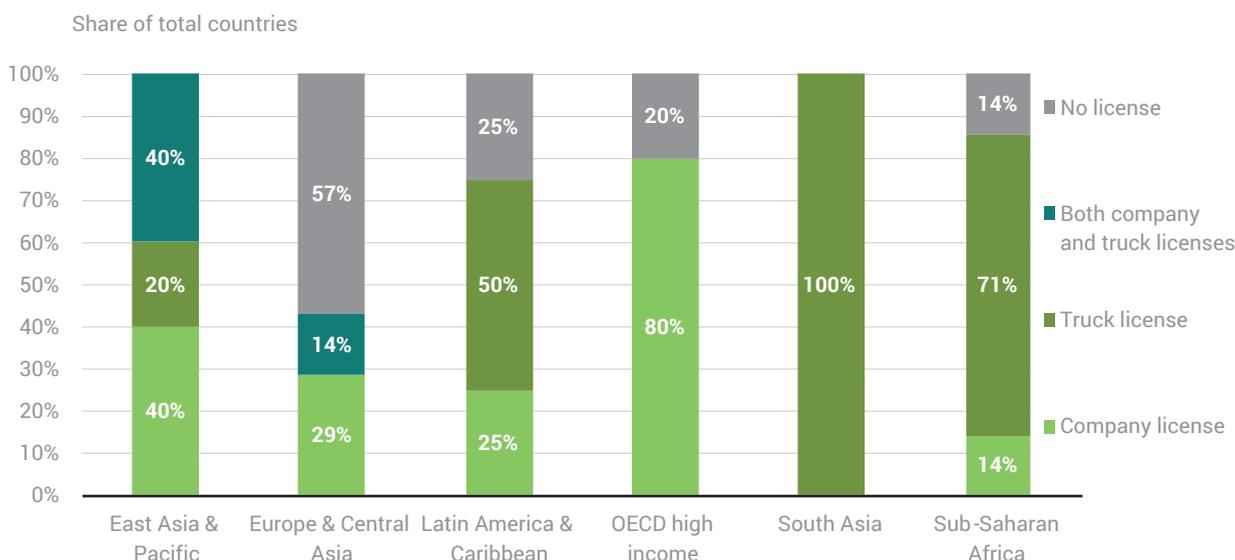
Company licenses are prevalent in OECD high-income countries, and truck licenses are mostly seen in Sub-Saharan Africa. Most countries in Europe and Central Asia do not require either a company or a truck license for domestic operations (figure 7.2).

High-income countries have the largest share of company-license regimes. Such licensing trends suggest that transitioning toward a company-license regime is not an easy task. Such systems may imply other regulatory reforms, such as labor law reforms that set standards for the access to the profession of licensed drivers or corporate tax code reforms associated with a company license. Another challenge for lower-income countries is the cost of investing in the enforcement of higher and more complex quality standards. But some low-income countries—such as Rwanda and Ethiopia—have company-license systems.

quality standards more than truck licenses,¹¹ which can be appropriate regulatory instruments to set basic trucking service standards, especially in more informal markets.

Licenses are also crucial to guarantee certain safety standards since trucking involves heavy and sophisticated machinery requiring training and regular maintenance.

FIGURE 7.2 Transport license systems vary across regions



Source: EBA database.

Note: The Middle East and North Africa is excluded from the sample as EBA does not cover a representative number of countries (only Jordan and Morocco).

Online availability of transport regulations and license applications is not widespread

Transparency and information are crucial to enable citizens to monitor the quality of government services.¹² Accessing and understanding the requirements for a license ensures a predictable business environment for transport operators. It also enables them to demand better regulatory quality and reduces potential for discretionary practices by public officials. Evidence from the Asia-Pacific Economic Cooperation (APEC) suggests that increasing the transparency of transaction costs could raise intra-APEC trade by 7.5%.¹³

In many countries transport regulations are not easily accessible, evident in the number of countries still not publishing their transport regulations on government websites. And of the 24 countries publishing licensing requirements online, only 5 offer applicants an online platform to submit their license applications. Despite the costs and resources to set up such platforms, they can make licensing easy and accessible for applicants far from an application office. Greater transparency is also associated with less discrimination in entry. Countries that do not impose discriminatory requirements to obtain a license—such as nationality, mandatory association membership and minimum operational capacity criteria—also have the most transparency.¹⁴

Company licenses set higher standards for truck operators at no significantly higher cost

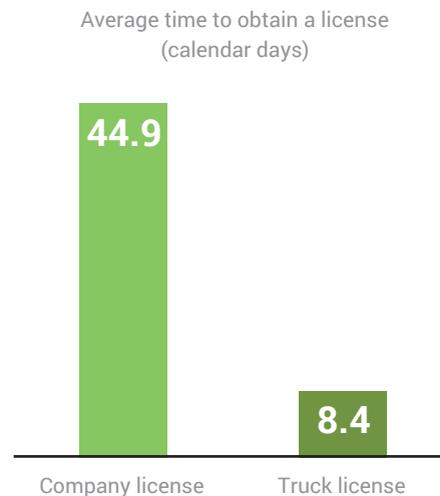
Transport regulations that strike the right balance between ensuring enforcement of essential safety and quality standards and avoiding excessive regulatory burdens for transport operators can lead to both better transport services and lower costs. Professional standards and certification for logistics service providers are important parts of an effective logistics sector. But quantitative and economic regulations of transport services that do not have an explicit and objective justification should be cut.¹⁵

Obtaining a company license takes longer than in other licensing systems such

as truck regimes.¹⁶ But company licenses must comply with a wider number of technical and qualitative prerequisites such as applicant's proof of good repute, financial capacity, professional competence, operational capacity and fulfillment of tax obligations. So processing time in company systems tends to be longer than in truck systems—where technical and qualitative prerequisites are more limited (figure 7.3).

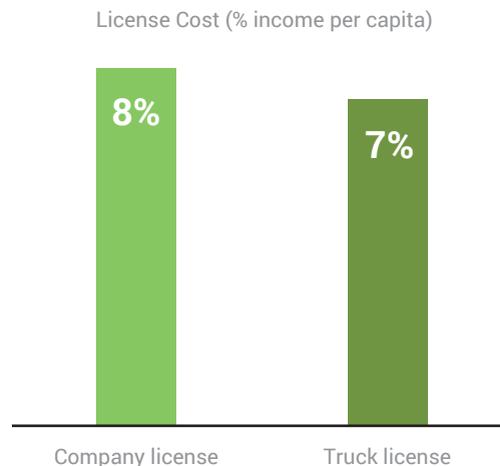
Countries with company-license systems record higher absolute costs than countries with truck-license systems. But relatively, company licenses are only slightly costlier than truck licenses (figure 7.4). And given that company licenses are valid longer than truck licenses, their yearly cost is considerably lower. Company-license systems strike a good balance between the standards of quality established and the efficiency of the issuance procedure.

FIGURE 7.3 Truck-level licenses are issued more expeditiously than other regulated systems



Source: EBA database.

FIGURE 7.4 Company licenses are more cost-effective than other licensing systems



Source: EBA database.

Linking Logistics Performance Index (LPI) data with EBA transport licensing categories reveals that countries with company-license systems record greater transport service satisfaction (as measured by perceptions of freight forwarders on the competence and quality of service provided by road transport service providers) than countries with other licensing systems (figure 7.5).¹⁷ Truck licenses record the lowest satisfaction rates of any licensing regime (as measured by the percentage of respondents reporting high satisfaction), supporting the assumption that market entry quality criteria in company-license systems improve the professionalism of road transport operators.

The costs of technical inspections vary across countries

One of the key obstacles to an efficient road transport sector is the condition of vehicles, especially trucks. Trucks in poor condition lead to unreliable services and high operating costs from breakdowns and repair work. This affects road safety and the environment—for example, through higher emissions. For users of road transport services, reliable services

are important. Post-harvest losses due to transport conditions or accidents can cause a significant loss of income for farmers. To improve road safety and reliability of services, countries need an efficient system of technical inspections. Regular inspections can ensure that vehicles in operation are properly maintained to ensure their safety and durability.¹⁸ Frequent and systematic vehicle tests make roads safer and reduce the number of accidents.¹⁹

Regular inspections are mandatory in all countries except Georgia, where technical inspections will become mandatory only in 2017. And in high-income countries such as EU members, the regulator monitors the quality of the technical inspection by introducing minimum standards and certifying centers that ensure compliance with the requirements. But in countries without such regulations, the technical inspection quality relies on each service provider, so the risk of a low-quality inspection is higher.

The average cost of a (first-time) technical inspection is 2.9% of income per capita, ranging between 0.1 and 13.9% (figure 7.6), and thus is not a constraining factor in most countries. But in

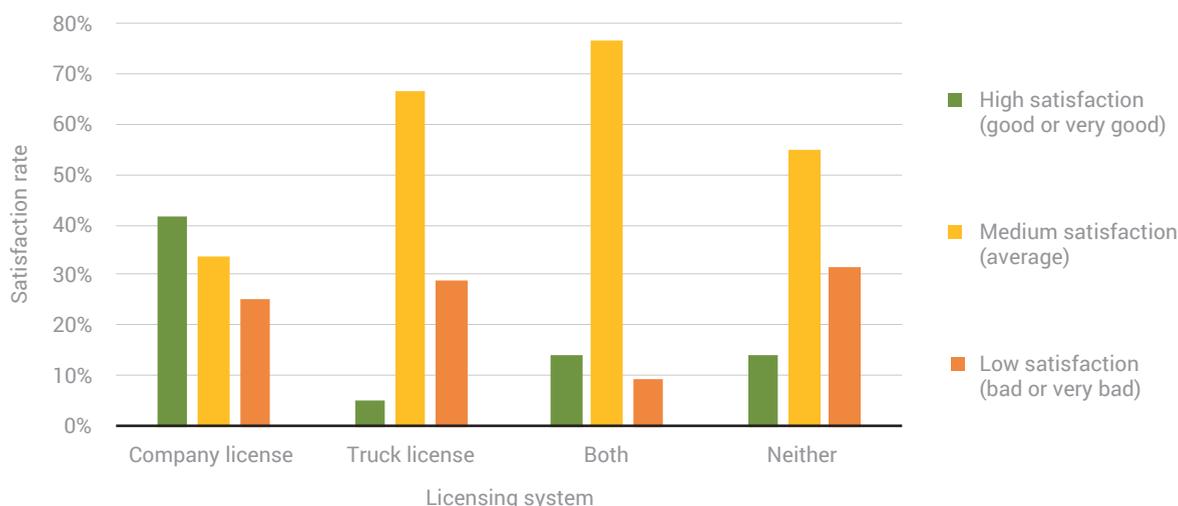
low-income countries it costs more of income per capita than in high-income countries. The average time to obtain a technical inspection certificate (a few hours) and the average validity of these certificates (six months) are similar across the 40 countries.

Few countries are truly open to international competition coming from their largest trading partner

Harmonizing and liberalizing regional road transport services exposes national service providers to wider regional competition. And that can lead to lower transport tariffs, higher efficiency and higher transport quality.²⁰ EBA transport indicators measure the number of transport rights granted to truck companies registered in the largest neighboring agricultural trading partner (box 7.2 and figure 7.7).

Additional transport rights denote an increased freedom of movements and operations allowed to foreign firms willing to do business in the domestic market. In spite of the efforts to facilitate cross-border transport, there is a wide disparity in actual openness to cross-border

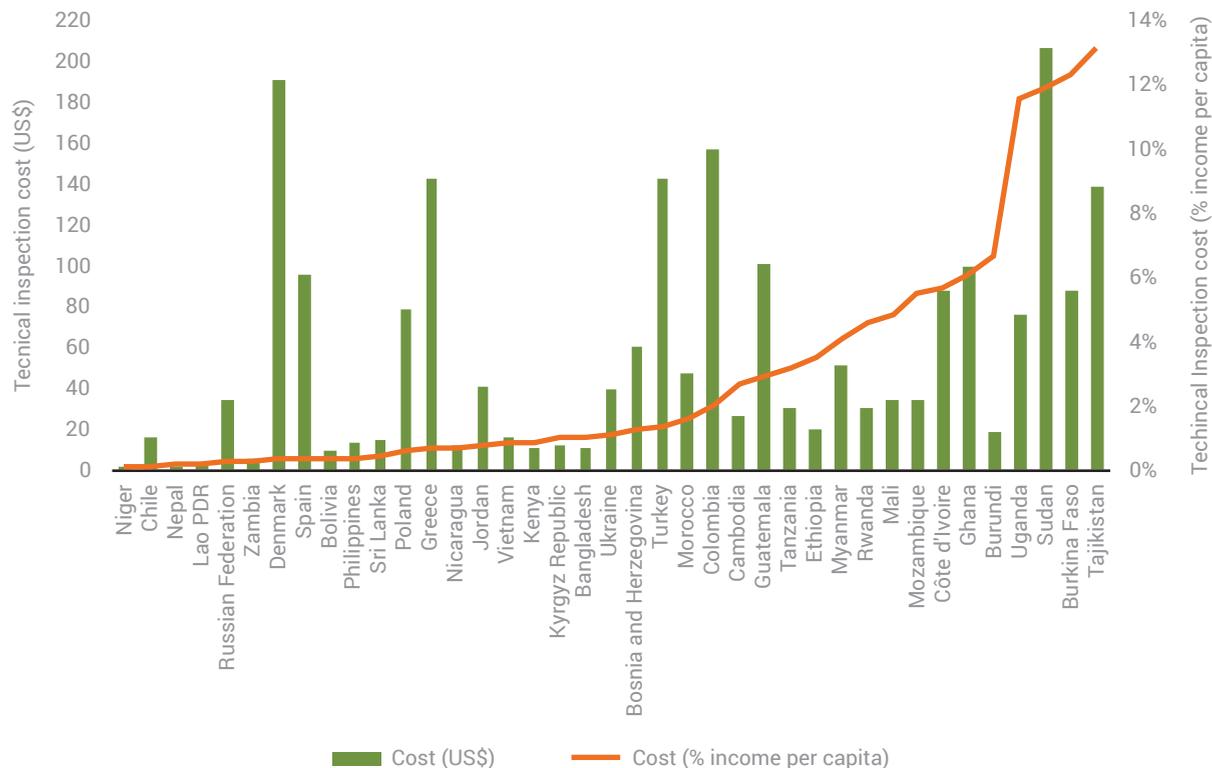
FIGURE 7.5 Company-license systems record greater user satisfaction



Sources: EBA database, LPI database.

Note: Graph developed based on question 19-1 of the 2014 LPI Survey. The LPI collects data in 33 of the 40 EBA countries.

FIGURE 7.6 The cost of technical inspection is not a constraint in most countries, but some disparity is observed in its relative cost



Source: EBA database.

Note: Regular vehicle inspections are mandatory in all countries except Georgia, where technical inspections will only become mandatory in 2017.

competition. Only four countries (Denmark, Greece, Poland and Spain) grant foreign companies the same transport entitlements as they do to domestic firms, and even in such cases there are limitations (figure 7.7).²¹ But when granting transport rights to foreign companies governments should make sure that foreign trucks and transport firms comply with the same standards required to domestic operators. Only in such a way will licenses maintain minimum safety and quality service standards and provide a level playing field for competition.

The East African Community promotes cross-border transport openness by harmonizing standards on road transportation and standardizing license requirements. A larger market and greater competition benefit local producers by improving the quality and cutting the

price of transport services, prompting more producers to participate in regional value chains.

Regulations in the EU countries measured (Denmark, Greece, Spain and Poland) demonstrate greater openness to competition from truck operators from their largest neighboring agricultural trading partner as they grant on average all five transport rights measured by EBA. South Asia (Bangladesh, Nepal and Sri Lanka) is the least open region with an average of 1.3 rights granted (figure 7.8). Basic transport rights are granted in 38 of the 40 countries surveyed, except Myanmar and Sri Lanka.²² But 18 countries have a quota on the number of permits granted. More open transport increases trade, as shown by the correlation between merchandise exports and regional liberalization as measured by the cross-border

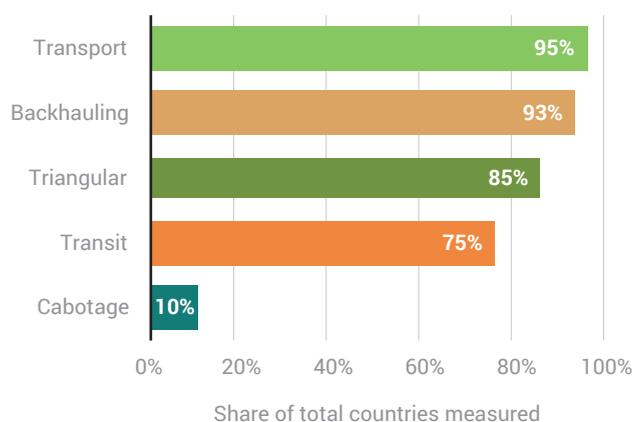
transport indicator.²³ Granting foreign companies access to the domestic market—for example, by allowing importing and backhauling—increases cross-border trade and competition. But many obstacles to cross-border transport result from a lack of harmonization or lack of mutual recognition of a variety of technical standards, such as axle-load limits, truck dimensions and driver's licenses. So, bilateral and multilateral agreements granting transport rights should also address the harmonization and mutual recognition of transport standards that hinder cross-border transport. Public access to the respective information on transport rights and applied transport standards should be a fundamental part of harmonization.

Greater regional integration and easier trade and transit practices reduce entry

BOX 7.2 Transport rights definitions

- Transport rights: A truck registered in country A is allowed to transport goods produced in its country to country B for sale.
- Backhauling rights: A truck registered in country A is allowed to load goods in country B and transport them back to Country A.
- Transit rights: A truck registered in country A is allowed to travel through country B to deliver goods in country C.
- Triangular rights: A truck registered in country A is allowed to pick up goods in country B and transport them to country C.
- Cabotage rights: A truck registered in country A is allowed to pick up goods in country B and transport them to a different point in country B.

FIGURE 7.7 Only a few countries allow cabotage



Source: EBA database.

Note: Transport rights are entitlements granted by domestic transport authorities to trucking companies registered in the largest neighboring agricultural trading partner. For this study, transport rights are categorized along five basic rights or freedoms. Cabotage rights imply that foreign companies are granted treatment similar to domestic truck companies. Cabotage rights are only allowed in Denmark, Greece, Poland and Spain.

costs for transport service operators in landlocked countries.²⁴ So, achieving efficient cross border transport by reducing transit times and transport costs is another major objective for regional economic communities.²⁵ OECD countries that are also EU members are the only countries that allow cabotage, which the European Commission labels

a free market essential. Allowing cabotage rights and optimizing capacity can improve efficiency and reduce environmental damage.²⁶

Some regional economic communities also require contracting parties engaged in international transactions to sign a document acknowledging carrier

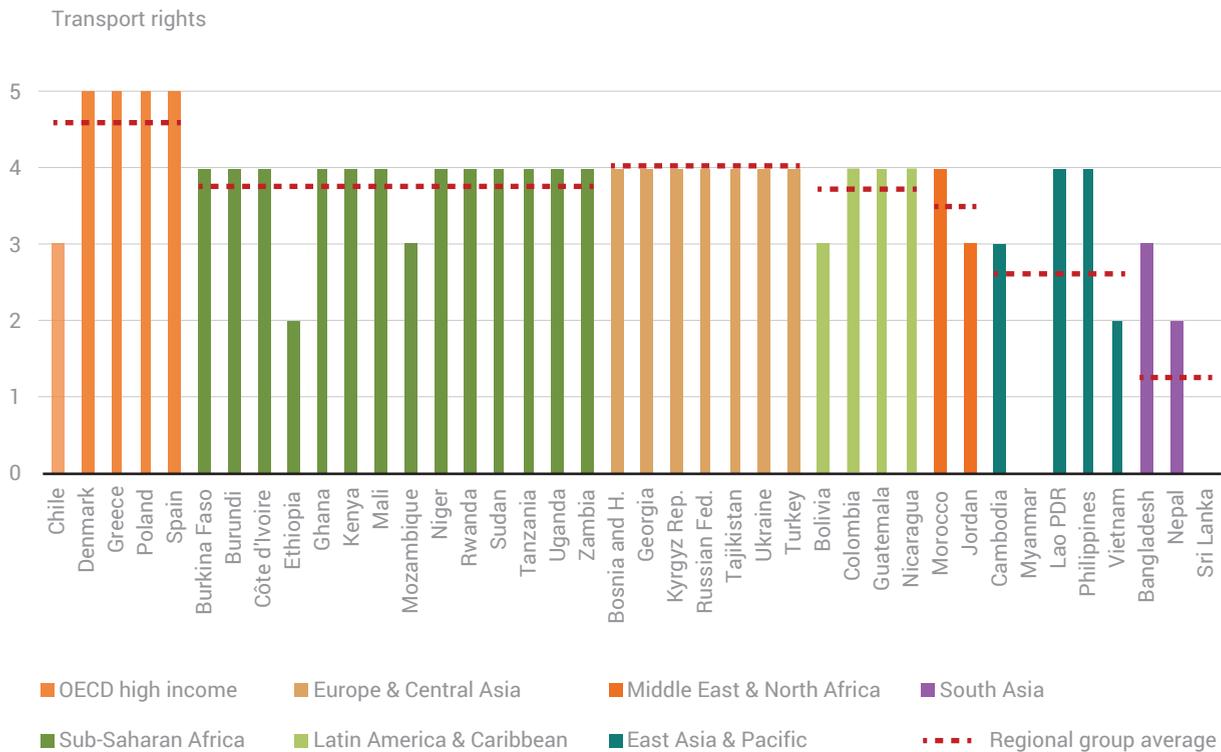
liabilities or a waybill, as in ECOWAS and the European Union. Farmers can use such transport documents to claim losses from transport.

Conclusion

Improving access to reliable and affordable transport for agricultural producers is key to developing and strengthen a country's agricultural sector. There is still plenty of room for countries to improve their laws and regulations and move towards good practices identified, such as:

- **Strong licensing systems to access the road transport sector based on minimum requirements such as vehicle technical inspection certificates.** Tanzania's 2012 'Goods carrying vehicle' regulations establish clear binding principles to obtain and maintain a truck license, including valid vehicle registration cards, vehicle third-party liability insurance, vehicle inspection report from an authorized inspector or copy of employment contract between the driver and the licensee.
- **Eliminate discriminatory requirements to obtain road transport licenses, such as a certain nationality, membership in a trucking organization and minimum operational capacity.** Through its 2003

FIGURE 7.8 Regulations in OECD high-income countries demonstrate greater openness to cross-border competition, while countries in South Asia and East Asia and the Pacific tend to limit the scope of operations for foreign firms



Source: EBA database.

decree regulating merchandise road public transport, Morocco ensures any citizen with a nationally-constituted company can offer trucking services, ruling out the necessity to be a member of a transport association or to have a minimum fleet size.

- **Establish company licenses that enforce qualitative criteria such as good repute, financial standing and professional competence.** In 2014 Turkey reformed their transport regulations to create K1-type licenses requiring operators to provide proof of minimal working capital (\$3,500), maximum fleet age (20 years) and national certification for managers.
- **Make licensing requirements more transparent and accessible, and collect and update road transport statistics.** Colombia's Ministry

of Transport consolidates all laws, regulations, directives, decrees, notifications or resolutions pertaining to road transport and makes them easily accessible on their governmental website.

- **Promote market-based price-setting mechanisms and freight allocation systems.** Nicaragua's 2005 'General road transport law' provides a solid legal foundation to guarantee that the conditions of carriage including pricing and cargo quantities are solely determined by the contracting parties without any external interference.

Reforming laws and regulations is a challenge for policymakers given the complexity of the transport sector. Identifying good regulatory practices is difficult when dealing with agricultural transport because besides ensuring efficiency,

laws and regulations are also needed to protect clients, consumers and the environment from unsafe, unreliable and polluting transport. The transport topic identifies and measures several key regulatory constraints that can hinder farmers and agribusiness firms from reaping the benefits of growing urban and rural markets in which to sell their production. These actionable indicators can be used as a starting point for discussion with policymakers on ways to address regulatory constraints that might obstruct efficient and quality transport for agricultural producers, buyers and exporters.

Notes

1. Staatz and Dembélé 2007.
2. Lema and others 2008.
3. World Bank 2010.

4. World Bank 2010.
5. World Bank 2010.
6. Araya, Pachón and Saslavsky 2012.
7. International Road Transport Union 2007.
8. Lema, de Veen and Abukari 2008.
9. Teravaninthorn and Raballand 2009.
10. Osborne, Pachon and Araya 2014.
11. *Company license*: Specific licenses granted to established companies to legally offer domestic road transport services. For the purposes of this study general business registration licenses are not considered. Instead, a company-level license is a specific permit required exclusively for the provision of road transport services. A transport license at company level generally allows to operate several trucks under the same license. *Truck license*: Truck licenses are licenses granted to each truck to legally transport goods in the domestic market. For the purposes of this study vehicle registration certificates or road worthiness/technical inspection certificates are not considered, as these are usually not specific to the provision of road transport services.
12. Geginat and Saltane 2014.
13. Helble and others 2007.
14. Data analysis demonstrates a moderate positive correlation (0.27) between transparency (defined in this analysis by the scores obtained to the questions: "Are the license/permit requirements publicly available online?" and "Can the application for a license/permit or its renewal be submitted electronically?" Each country is ranked high, medium or low based on their scores in both questions) and additional requirements considered as discriminatory (mandatory association membership, minimum operational capacity or nationality criteria). This correlation is 5% significant when controlling for income per capita.
15. World Bank 2010; This is known as the 'regulatory guillotine' concept, in which all regulations affecting a certain sector or transaction are publicly listed and then automatically rescinded if an explicit justification for the regulation is not provided within a certain time frame. The 'economic regulations' mentioned in this context by the World Bank's Trade and Transportation Facilitation Assessment toolkit would include issues such as transportation price controls, quantitative limits on the provision of trucking services and so on.
16. *Company license*: Specific licenses granted to established companies to legally offer domestic road transport services. For the purposes of this study general business registration licenses are not considered. Instead, a company-level license is a specific permit required exclusively for the provision of road transport services. A transport license at company level generally allows to operate several trucks under the same license. *Truck-level license*: Truck-level licenses are licenses granted to each truck to legally transport goods in the domestic market. For the purposes of this study vehicle registration certificates or road worthiness/technical inspection certificates are not considered, as these are usually not specific to the provision of road transport services.
17. The LPI is a World Bank project published every two years since 2007 and measuring logistics performance or the on-the-ground efficiency of trade supply chains. The 2014 edition covers 160 countries and compiles information from approximately 1,000 respondents, providing a total of around 5,000 country assessments (website: <http://lpi.worldbank.org/>).
18. IRU 2011.
19. Cuerden, Edwards and Pittman 2011.
20. Raballand, Kunaka and Giersing 2008.
21. Granting cabotage rights to truck companies coming from the largest agricultural neighboring trading partner is equivalent to giving foreign transport firms national treatment with regard to transport operational freedom.
22. Sri Lanka transports goods internationally mostly by air or water.
23. *EBA* cross-border transport indicators measure the number of transport rights granted to the largest neighboring agricultural trading partner, including mandatory carrier's liabilities documents.
24. World Bank 2014.
25. Runji 2015.
26. European Commission 2006.

References

Araya, G., M. C. Pachón and D. Saslavsky 2012. "Road Freight in Central America: Five Explanations to High Costs of Service Provision." Background Paper, World Bank, Washington, DC.

Cuerden, R., M.J. Edwards and M.B. Pittman. 2011. "Effect of Vehicle Defects in Road Accidents." Transport Research Laboratory Limited. Published Project Report PPR565.

European Commission. 2006. *Road Transport Policy: Open Roads across Europe*. Brussels: European Commission.

Geginat, C., and V. Saltane. 2014. "Transparent Government and Business Regulation Open for Business?" Policy Research Working Paper 7132, World Bank, Washington, DC.

Helble, M., B. Shepherd and J. S. Wilson. 2007. "Transparency, Trade Costs, and Regional Integration in the Asia Pacific." Policy Research Working Paper 4401, World Bank, Washington, DC.

International Road Transport Union. 2007. "IRU Position on Access to the Profession of Road Passenger and

- Goods Transport Operator." Position Paper, IRU, Geneva.
- Lema, C., J. de Veen and M. Abukari. 2008. "Comprehensive Review of IFAD Rural Roads, Travel and Transport (RTT) Experiences, 1994–2007." International Fund for Agricultural Development.
- Osborne, T., M. C. Pachón and G. E. Araya. 2014. "What Drives the High Price of Road Freight Transport in Central America?" Policy Research Working Paper 6844, World Bank, Washington, DC.
- Raballand, G., C. Kunaka and B. Giersing. 2008. "The Impact of Regional Liberalization and Harmonization in Road Transport Services: A Focus on Zambia and Lessons for Landlocked Countries." Policy Research Working Paper 4482, World Bank, Washington, DC.
- Runji, J. 2015. "Africa Transport Policy Performance Review: The Need for More Robust Transport Policies." Sub-Saharan Africa Transport Policy Program Discussion Paper 103, World Bank, Washington, DC.
- Staatz, J., and N. Dembélé. 2007. "Agriculture for Development in Sub-Saharan Africa." Background Paper for the World Development Report 2008.
- Teravaninthorn, S., and G. Raballand. 2009. "Transport Prices and Costs in Africa: A Review of the International Corridors." Policy Research Working Paper 46181, World Bank, Washington, DC.
- World Bank. 2010. *Trade and Transport Facilitation Assessment: A Practical Toolkit for Country Implementation*. Washington, DC: World Bank.
- . 2014. "Improving Trade and Transport for Landlocked Developing Countries: A Ten-Year Review." World Bank–United Nations report in preparation for the 2nd United Nations Conference on Landlocked Developing Countries (LLDCs).