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The Regional Comprehensive Economic Partnership Agreement and Its Expected Effects on World Trade

The Regional Comprehensive Economic Partnership agreement creates the world's largest free trade zone. The agreement has the potential to increase trade relations among its members and further promote the development of regional value chains in "Factory Asia". This article presents the topics included in the recently concluded agreement, details the existing economic linkages between its members and discusses the expected consequences for its member states and third countries.

On 15 November 2020, 15 Southeast Asian and Pacific countries signed the Regional Comprehensive Economic Partnership (RCEP) agreement creating the world's largest free trade zone. The members of the Association of Southeast Asian Nations (ASEAN), including Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam, initiated the talks for the trade deal. After more than eight years of negotiations, the ASEAN members reached an agreement with China, Japan, South Korea as well as Australia and New Zealand. As of today, the trade bloc covers 28% of global GDP, 28% of global trade and 29% of the global population (see Figure 1) – the sheer size is impressive and unprecedented.

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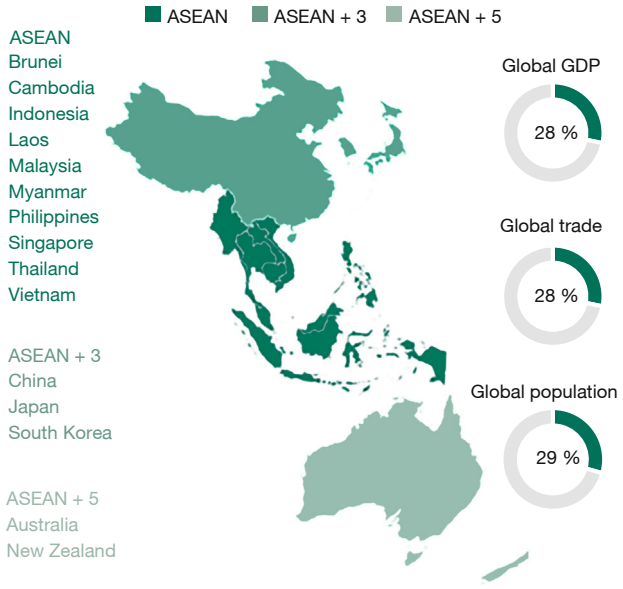
What topics are included in the recently concluded agreement? What are the expected consequences for intra-RCEP trade? To what extent are third countries affected? This article aims to shed light on these questions. In a first step, it describes the economic linkages between RCEP states, which were already strong before the mega deal was concluded. The rise of China and the formation of the "Factory Asia" can in part explain the observed patterns. "Factory Asia" refers to a highly interconnected production process across national borders within RCEP countries that has gained importance with emerging global value chains.

Secondly, this article investigates the content of the RCEP agreement and likely changes in trade policy. Unlike most trade agreements, tariffs as well as non-tariff barriers have already been largely eliminated between RCEP states: Except for the country pairs Japan-China and Japan-South Korea, trade agreements for all bilateral links between RCEP countries already exist. Only a few additional tariff cuts are expected, but the largest reduction of trade barriers will be due to the harmonisation of the rules of origin. Under the current network of bilateral treaties and given the tight linkages in the region through complex value chains, rules of origin constitute a high bureaucratic burden for firms in the region.

On the one hand, the RCEP agreement is expected to boost intra-RCEP trade, which might decrease demand from third countries due to trade diversion. Countries that are strongly connected to RCEP states but are not part

Figure 1
The 15 members of the RCEP agreement



Sources: World Bank; UN Comtrade, Gaulier and Zignago (2010); authors' illustration.

of the trade agreement are affected particularly negatively. On the other hand, more resilient supply chains and cheaper production in the RCEP region provide an opportunity for firms doing business there and final consumers.

Background and trade patterns of RCEP members

ASEAN was established in 1967 and covers not only topics in trade policy, but also other economic issues such as investment promotion, intellectual property rights, compliance with labour standards as well as environmental and security issues. Already in 1990, the idea of a trade agreement between the ASEAN members, China, Japan and South Korea, i.e. an ASEAN +3 agreement (see Figure 1), floated around. However, it took 22 years for plans to solidify: in 2012 the negotiation talks on RCEP started, in which India, Australia and New Zealand also participated. Eight years later, on 15 November 2020, the agreement was finally signed, albeit without India, who decided shortly before the finalisation of the RCEP agreement against a membership citing domestic policy reasons.

The relatively short duration of negotiations is a remarkable achievement,[1] especially because the countries started under adverse conditions. Conflicts and historical rivalries between individual parties made the talks rather complicated; the historically difficult relations between Japan and South Korea culminated in 2019 with a trade conflict. Furthermore, the large heterogeneity between the 15 participating countries presented a challenge: next to high-income countries (Japan, Singapore, South Korea, Australia and New Zealand) and the giant China, several emerging countries, as well as Laos and Cambodia, two of the poorest countries in the world, were involved in the negotiation talks. Such a high degree of heterogeneity leads to diverging interests, which are hard to reconcile – the stagnating multilateral WTO negotiations are an example.

Why did the countries make the effort to reach an agreement despite these difficulties? First, the RCEP agreement is the Chinese response to the failed Trans-Pacific Partnership (TPP) Agreement, which was signed in 2016, but was revoked only a few days after the inauguration of former US President Trump. China took the opportunity to fill the power vacuum and wrapped up a trade deal without US participation. Second, the economic linkages between RCEP countries are profound and have increased in the last years. Figure 2 shows the most important trading partners of RCEP countries since 1990. A distinction is made between intra-RCEP trade, trade with "Western countries", defined as the EU28 and North American Free Trade Agreement (NAFTA), and trade with the rest of the world.

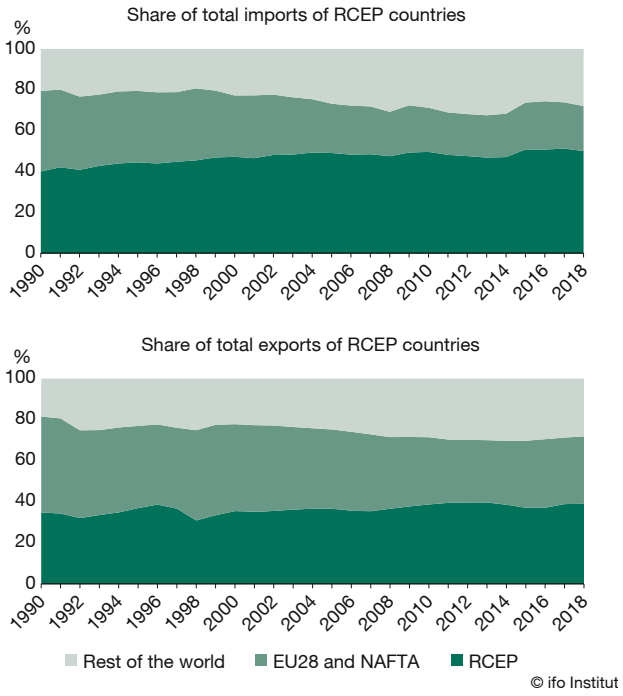
Trade between RCEP countries increased sharply since 1990

The relative importance of EU28 and NAFTA countries as trading partners for RCEP members has sharply declined. The import share decreased by 17 percentage points to 22% and exports decreased by 14 percentage points to 33% between 1990 and 2018. At the same time, the share of imports within RCEP has increased by ten percentage points and accounted for 50% of total imports in 2018. Interestingly, much of this development took place before China's accession to the WTO in 2001, the starting point for the rapid rise of the emerging economy. Similar patterns can be observed on the export side, although RCEP countries play a somewhat smaller role as a sales market in comparison to imports (39% of total exports in 2018).

Moreover, the region gained in importance with the rise of global value chains, which has been one of the most important developments for foreign trade of the 21st century (Baldwin, 2012). The next section discusses the role of global production networks to illustrate the extent of interdependencies between countries.

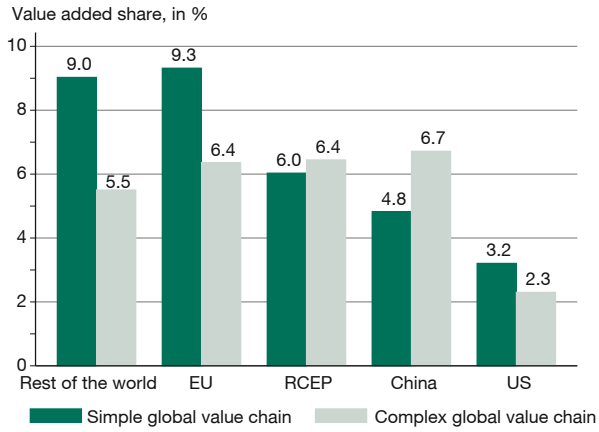
1 For the agreement between the EU-Canada Comprehensive Economic and Trade Agreement, for example, it took over ten years to complete negotiations.

Figure 2
Trade between RCEP countries and their partners



Sources: UN Comtrade; Gaulier and Zignago (2010); authors' illustration.

Figure 3
Value added linkages across regions in 2015



Sources: OECD Inter-Country Input-Output Tables 2018, authors' own calculation.

The rise of global value chains in RCEP countries

The rise of global value chains (GVCs) offers a good indicator of interdependencies between RCEP states. GVCs are a special form of production that relies heavily on international trade, as the production of a final good may require that intermediate inputs or intermediate goods cross a national border several times. The OECD's annual Inter-Country Input-Output tables covering the period 2005 to 2015 are used to compute linkages of different stages of production across countries. The previous section provided an analysis using ordinary trade statistics. However, standard trade data do not account for input-output linkages of different stages of production across countries. Hence, standard data overestimate the value added generated by foreign trade. Moreover, the analysis using input-output tables allows us to better understand global linkages and thus interdependencies between countries. Several empirical facts are presented in the following.

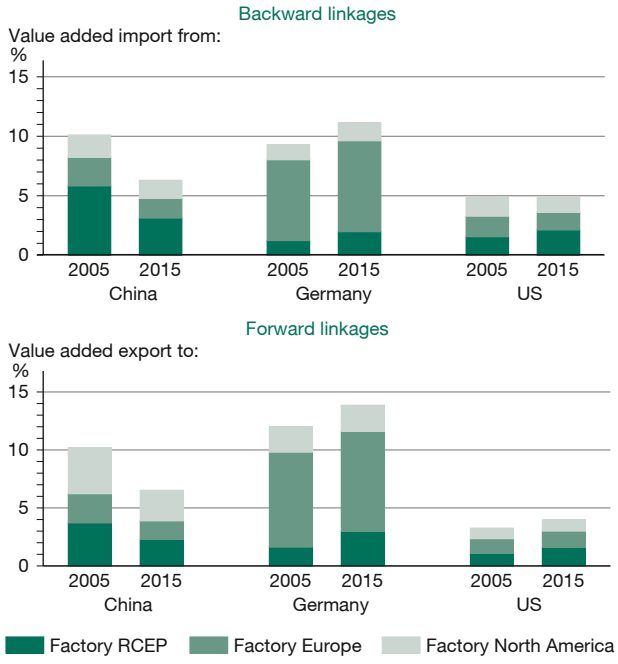
Complex GVCs are more prominent than simple GVCs in RCEP countries

The analysis follows Meng et al. (2019) and Wang et al. (2017) and characterises production activities into four broad types: (i) pure domestic, when value added of a good is produced and consumed in the same country, (ii) traditional trade, when only domestic value added is used to produce a final good that is exported and consumed in a foreign country, (iii) simple GVCs, when stages of production are divided across countries and factor content crosses a national border once for production abroad, and (iv) complex GVCs, when stages of production are divided across countries and factor content crosses a national border at least twice.

The first type of production activity, domestic production, represents the largest share of value added created in all countries under investigation. On average, 80.5% of the value added created in RCEP countries is produced and consumed domestically. This number is larger than the average for EU member countries (71.8%) or the average for the rest of the world (78.1%), which indicates the importance of the domestic market. The second type refers to "traditional trade" and accounts for on average 7% of the value added created in RCEP countries. In this case, value added is created in the home country and the final good is consumed in a foreign country.

Figure 3 focuses the value added created over simple or complex GVCs. It shows that GVC activities are relevant for value added creation. In RCEP countries, complex value chains are relatively more important than simple value chains. Over 50% of the value added created through GVCs is created through complex chains; in China this share is 58%, which is high in comparison to other countries. For instance, in the EU only 41%, in the US only 42% and in the rest of the world only 38% of the GVC value added is created through complex value chains. The high

Figure 4
Interdependencies between countries and factories



Source: OECD Inter-Country-Input-Output Tables 2018; own calculation.

share of goods that cross borders multiple times through GVCs in RCEP states indicates the importance of creating harmonised rules of origin for RCEP countries, as discussed below.

Regional supply chains: "Factory RCEP" is China's most important partner region

When analysing GVCs, it is possible to take the view of the upstream or downstream sectors/countries. We speak of forward linkages when the value added of a sector/country reaches the consumer. The question here is how much dependence there is on downstream production in another country. Backward linkages, on the other hand, evaluate supply chains to produce final goods, i.e. the direct and indirect supply structure with value added from upstream sectors/countries. The question here is how dependent a country is on value added from abroad to produce its own goods. We investigate interdependencies among the three largest production networks – "Factory RCEP", "Factory Europe" and "Factory North America" – and their three nodes, China, Germany and the US.

We uncover several empirical facts on supply linkages between countries (see Figure 4). First, the linkages between factories are not one-sided but reciprocal, as value added is created by all factories both in backward as well as in forward linkages. Second, regional value chains play an important role. In China, for instance, in the year 2015, 49% of the value added created through backward linkages and 35% of the value added created through forward linkages is created within RCEP countries. Third, different from Germany and the US, in China the share of value added created over GVCs decreased over time, both for backward and forward linkages. Fourth, the relative importance of "Factory RCEP" in the other factories increased over time, as shown for the factory nodes Germany and the US.

A quarter of imports of RCEP countries come from China

Table 1 shows for each of the 15 members the three most important trading partners and their shares of the total volume of trade in 2018. The table illustrates the strong linkages within the entire RCEP area, and in particular with China. RCEP states receive an average of 25% of their imported goods from China. China, as purchaser, belongs to one of the three most important markets in all member states besides Brunei and Cambodia. Furthermore, the table stresses the importance of the intra-RCEP trade. In almost all cases, the three most important importers and exporters of RCEP members are in fact other RCEP states. Only three non-members, the US, Germany and Hong Kong, are important trade partners, too.

The impact of RCEP on trade policy in the Asian region

For GVCs, low trade barriers between participating countries are particularly important because products cross country borders multiple times – with high barriers, high costs accumulate, and this type of production becomes unprofitable. Therefore, with the emergence of GVCs in Asia, RCEP members have had great incentives to liberalise trade policy, at least in sectors that are relevant for "Factory Asia", i.e. intermediate goods for complex industrial goods.

Most RCEP countries already have bilateral trade agreements

The tariffs and non-tariff barriers between RCEP countries have already been largely eliminated: except for Japan-China and Japan-South Korea, trade agreements exist between all remaining RCEP members. Table 2 gives an overview of the existing agreements. Dark green colouring means that an agreement has been reached. The average tariff within the RCEP area in 2017 was only 1.6%. Hence, at first sight the RCEP agreement does not lead to great changes and trade liberalisations for the member states.

Table 1

The three most important importers and exporters of RCEP members, 2018

	Imports			Exports		
Brunei	CHN (34%)	SGP (16%)	MYS (12%)	JPN (33%)	THA (12%)	SGP (9%)
Cambodia	THA (32%)	CHN (25%)	SGP (20%)	USA (19%)	DEU (10%)	JPN (8%)
Indonesia	CHN (24%)	SGP (14%)	JPN (9%)	CHN (14%)	JPN (10%)	USA (10%)
Laos	THA (67%)	CHN (23%)	JPN (2%)	THA (51%)	CHN (32%)	JPN (3%)
Malaysia	CHN (21%)	SGP (15%)	JPN (6%)	SGP (14%)	CHN (13%)	USA (10%)
Myanmar	CHN (40%)	THA (17%)	SGP (10%)	THA (26%)	CHN (25%)	JPN (7%)
Philippines	CHN (24%)	KOR (9%)	JPN (9%)	HKG (14%)	USA (14%)	CHN (14%)
Singapore	CHN (15%)	MYS (11%)	USA (9%)	CHN (14%)	HKG (13%)	MYS (10%)
Thailand	CHN (20%)	JPN (14%)	MYS (6%)	CHN (12%)	USA (11%)	JPN (10%)
Vietnam	CHN (33%)	KOR (19%)	JPN (6%)	CHN (20%)	USA (18%)	JPN (7%)
China	KOR (10%)	JPN (9%)	USA (7%)	USA (19%)	HKG (11%)	JPN (6%)
Japan	CHN (24%)	USA (11%)	KOR (5%)	CHN (19%)	USA (19%)	KOR (7%)
South Korea	CHN (21%)	USA (11%)	JPN (10%)	CHN (26%)	USA (12%)	VNM (8%)
Australia	CHN (24%)	USA (10%)	JPN (8%)	CHN (36%)	JPN (11%)	KOR (8%)
New Zealand	CHN (18%)	AUS (14%)	USA (9%)	CHN (24%)	AUS (15%)	USA (10%)

Notes: Shares in parenthesis; light green boxes refer to RCEP countries; AUS Australia, CHN China, DEU Germany, HKG Hong Kong, JPN Japan, KOR South Korea, MYS Malaysia, SGP Singapore, THA Thailand, USA United States of America, VNM Vietnam.

Sources: UN Comtrade; Gaulier and Zignago (2010); authors' illustration.

Table 2

Average bilateral tariff rates and existing trade agreements between RCEP members, 2017

in %

Importer \ Exporter	Brunie	Cambodia	Indonesia	Laos	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam	China	Japan	South Korea	Australia	New Zealand
Brunei		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cambodia	3		3	3	3	3	3	3	3	3	4	11	7	7	7
Indonesia	1	0		1	1	0	1	1	1	1	2	1	1	1	1
Laos	1	1	1		1	1	1	1	1	1	1	8	3	6	6
Malaysia	0	1	0	1		1	0	0	0	0	2	1	3	2	2
Myanmar	0	0	0	0	0		0	0	0	0	1	6	3	4	4
Philippines	0	0	0	0	0	0		0	0	0	1	1	1	1	1
Singapore	0	0	0	0	0	0	0		0	0	0	0	0	0	0
Thailand	0	1	0	1	0	1	0	0		0	3	1	3	1	1
Vietnam	1	1	1	1	1	1	1	1	1		2	5	3	3	3
China	1	1	2	1	2	1	2	2	1	2		12	9	5	1
Japan	1	0	1	0	1	0	1	1	1	2	3		2	2	5
South Korea	5	4	4	4	4	4	4	4	4	4	8	13		6	7
Australia	0	0	0	0	0	0	0	0	0	0	0	1	0		0
New Zealand	0	0	0	0	0	0	0	0	0	0	0	2	1	0	

Notes: The table shows the bilateral (unweighted) average tariffs of RCEP members. The tariff data describe the year 2017; for the trade agreements, all those notified to the WTO are included (cut-off date 25 January 2021). Dark green = deep agreement; light green = shallow agreement; dark grey = no agreement.

Sources: Teti (2020); WTO; authors' illustration.

Table 2 shows the average tariffs that apply for the 210 bilateral trade relationships in 2017. Import countries are shown in the rows, and the columns show the exporters, i.e. the table is to be read as follows: the average export tariff from Brunei to South Korea amounts to 5%. The tariff data is only available for 2017, thus tariff reductions coming from the Comprehensive and Progressive Agreement for Trans-Pacific Partnership, which has been in effect since 2018, are not included. This refers especially to the trade relation between Japan and New Zealand, for which tariffs are overstated.

Within ASEAN states tariffs are particularly low, but tariffs are also low for bilateral links between ASEAN and other RCEP members. The upper right part of the table shows high barriers between Cambodia, Laos and Myanmar against Japan, Australia and New Zealand, which stem from development policy objectives: highly developed trade partners grant those three countries a slow and gradual reduction of tariffs to reduce competition from Japan, Australia and New Zealand.

Largest tariff cuts expected for China, Japan and South Korea

The largest tariff cuts can be expected for the three largest economies: China, Japan and South Korea. Hence, trade between these three country pairs is expected to increase the most thanks to RCEP. Although there exists a trade agreement between China and South Korea, it has not yet led to tariff reductions on a large scale. Instead, tariffs still amount to 8%-9%, and non-tariff barriers still

exist.[2] Furthermore, a trade agreement has not yet been concluded for Japan and China or for Japan and South Korea. As these three economies are the most important in the Asian region, considerable trade-creating effects can be expected.

RCEP is less ambitious than most other modern agreements. While the Comprehensive Economic and Trade Agreement (CETA) between the EU and Canada, which is considered one of the most comprehensive in the world, eliminated 99% of all tariffs, RCEP is only expected to reduce up to 90% of tariffs. Exceptions, especially in the agricultural sector, are expected, as it is barely touched upon in the agreement. In other areas, for instance vehicles, full tariff elimination will take up to 20 years.

As in most modern trade agreements, RCEP also goes beyond the elimination of tariffs and regulates a wide range of other issues. The negotiating parties could agree on mutual recognition of professional qualifications. However, no agreement could be reached on environmental standards or on uniform labour standards. RCEP members also missed the opportunity to regulate future issues such as e-commerce. However, it is expected that RCEP will bring these topics back on the agenda, as regular meetings discussing the extension of the negotiated agreement are planned.

Harmonisation of rules of origin: An important achievement of RCEP

The harmonisation of the rules of origin is probably the most important achievement of RCEP. Although barriers for bilateral trade, for instance between ASEAN and Australia, are low, the structure of bilateral treaties that were so far regulating trade policy in the Asian region are a challenge for exporters: Every trade agreement has its own set of rules, the so-called rules of origin, that must be complied with in order to receive the preferential market entry.

To qualify for preferential market access, exporters need to provide proof of origin, which establishes "domestic production", i.e. all exported goods need to be produced mostly within the respective free trade area. For instance, Chinese automobile exporters need to prove that at least 40% of their production took place either in China or in another ASEAN country to receive duty-free access to Laos. If this proof is not provided, a tariff of 20% applies. Similar rules apply to automobile exporters who supply to other countries with whom China has signed an agreement. However, in this case only the intermediate inputs from the respective partner count when determining the share of domestic production. With respect to Chinese exports to Australia, only intermediate inputs from China or Australia can be considered to reach 40% of domestic production.

This is costly and inefficient, especially for exporters with complex global value chains, which span several Asian countries: Instead of using the most efficient intermediate producer, countries might end up using a more expensive one just to comply with the rules of origin. Alternatively, exporters can decide not to comply and instead pay the most-favoured-nation tariff. Either way, unnecessary costs arise. Complex GVCs make it harder to accumulate enough regional value content to comply with the rules of origin as the production is fragmented and scattered across different countries.

RCEP consolidates and harmonises the rules of origin of existing contracts: Intermediate inputs from the 15 member states also count in domestic production. This will promote even stronger economic linkages and the expansion of existing supply chains despite low tariff reductions. This is particularly important for complex GVCs, which are affected much more adversely by strict rules of origin. The multiple crossing of borders amplifies the costs that arise due to the non-eligibility of preferential treatment.

Impact of RCEP on world trade

The RCEP agreement leads to lower trade costs between member states and harmonises the rules of origin, which is relevant given large interdependencies between RCEP members. Since RCEP countries account for about 30% of world trade, the agreement brings challenges and opportunities for third countries, too. Intensified trade within RCEP will divert trade from third countries.

Figure 5 shows the dependencies of selected third countries from RCEP. For this purpose, we calculate the trade share with RCEP members, i.e. exports to RCEP as a share of total exports of a country (left panel) and imports from RCEP as a share of total imports of a country (right panel). We analyse the trade exposure of the EU28 members, India, Russia, the US, the Mercosur members (Argentina, Brazil, Paraguay and Uruguay) and consider the rest of the world in the aggregate.

Some aspects stand out: First, RCEP is a minor trade partner for the EU28 members. Only 9% of the total exports of the EU28 go to RCEP countries, and 13% of total imports are coming from RCEP countries. In contrast,

2 Cheong (2019) finds only small effects for the trade agreement between China and South Korea.

Figure 5
Share of trade between selected third countries and RCEP countries

Sources: UN Comtrade; Gaulier and Zignago (2010); authors' illustration.

these shares are much higher in other countries: 25% of US products are exported to the RCEP region, the share for the Mercosur countries amounts to 31%. Interestingly, except for Mercosur, the share of imports is always higher than the share of exports. India imports 36% of all imports from the RCEP area, the US 37% and the Mercosur states 28%.

Higher intra-RCEP trade leads to lower demand for goods from third countries, for which RCEP may therefore have negative effects. Particularly affected are countries that are strongly intertwined with RCEP countries, but are not part of the deal, such as India, the US and the Mercosur members. At the same time, more resilient supply chains and cheaper production in the RCEP region provide opportunities for firms doing business in Asia. Moreover, harmonised standards across all 15 RCEP members can be expected, which helps firms from third countries that export to Asia.

Conclusion

The RCEP agreement creates the world's largest trade zone. This article shows that (i) trade relations and interdependencies between RCEP countries are more prominent in comparison to third countries, (ii) the relative importance of intra-RCEP trade has increased over the years, (iii) complex value chains play an important role in the region, and (iv) for the giant China, "Factory RCEP" is the most important partner network. The RCEP agreement has the potential to increase trade relations among its members and further promote the development of regional value chains in "Factory Asia".

Although only small tariff reductions are expected, given that most country pairs within RCEP already have bilateral trade agreements, one can expect trade creating effects from RCEP. The most important contribution of RCEP is the harmonisation of the rules of origin, which has important positive implications for global value chains in the region. On the one hand, India and the US are expected to be affected most by trade diversion effects, whereas RCEP only plays a minor role for the EU28 members. On the other hand, more resilient supply chains, harmonised trade standards and lower production costs in the "Factory Asia" also provide opportunities for exporters from third countries.

Even if the RCEP agreement is not deep in comparison to prior agreements such as CETA, its ratification puts the US and the EU under pressure. The EU and the US are currently not making progress with their trade policies: The EU struggled with Brexit and is not in a position to ratify further trade agreements such as CETA or Mercosur. China and Asian countries, on the other hand, demonstrate that they can negotiate through the largest trade zone of the world.

Since the negotiations have already been concluded, it would be easy for President Biden to revive the TPP. The EU should intensify trade talks with Asian partners, too. While trade agreements with Japan, South Korea and Singapore already exist, negotiations with Australia, New Zealand and the ASEAN members progress only slowly. Chances of a trade deal with China are slim: although the EU made significant progress towards signing a bilateral investment agreement with China by the end of 2020, a comprehensive trade agreement is not yet in sight.

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