Research Institute for International Management

University of St.Gallen

The Sino-Swiss Free Trade Agreement – 2023 Academic Evaluation Report (10th Anniversary Edition)

中国-瑞士自由贸易协定—2023年学术评估报告(十周年版)

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Seismo

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(十周年版)

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Introduction

第一部分

简介

1.1 Editors' Foreword: The 10-year Anniversary of the Sino-Swiss FTA, Background and Significance

by Tomas Casas-Klett, Zhikun Cui, Xinquan Tu and Patrick Ziltener

It is with great pleasure that we are publishing this report on the occasion of the 10th anniversary of the Sino-Swiss Free Trade Agreement (SSFTA).

The negotiations on the SSFTA began in 2011, and on July 6th 2013, it was signed by Federal Councillor Johann N. Schneider-Ammann and the Chinese Minister of Commerce, Gao Hucheng. Since it came into force on July 1st 2014, the SSFTA has established itself as the most utilized FTA outside Europe for Swiss exporters.

As was the case with its predecessor, the *Sino-Swiss FTA – 2018 Academic Evaluation Report*, we analyze the SSFTA not from a theoretical point of view, but in terms of its practical impact and daily relevance for consumers, businesses and decision-makers in both countries.

Since the SSFTA covers a broad range of issues, from trade in goods and services, the promotion of investment, competition, and the protection of intellectual property rights to several areas of economic and technical cooperation between the Swiss and Chinese governments, we have focused on selected aspects.

Given that unilateral measures have kept their relevance in a world of FTAs, we dedicate a chapter to China's increasing openness for trade and investment, through tariff reductions and the removal of restrictions.

At the center of the SSFTA is the dismantling of tariffs on goods. Some tariffs were eliminated on day one of the SSFTA coming into force, but most were reduced over a time span of five or ten years. This means that today we have come close to the realization of free trade between Switzerland and China. For this reason, the analysis of the SSFTA's utilization by exporters and importers from Switzerland and China is of great importance. While a large proportion of the potential benefits have been realized, there is still room for improvement.

For that reason, we have dedicated significant research resources into establishing SSFTA utilization rates and analyzing the reasons why the agreement is and is not utilized. For both countries, we have identified the key factors that influence companies' decisions and experiences related to the SSFTA, and surveyed practitioners to understand the determinants of non-utilization. We have encountered great interest and a willingness by both Swiss and Chinese companies to report their experiences in using the SSFTA. We are extremely grateful for their valuable inputs to this report.

The contributors to this report have striven to provide original insights. For instance, for the first time, an analysis of the trade in services between China and Switzerland is made with a special focus on ICTs, intellectual property charges, financial services, and digitally deliverable services. The topic of trade in services will become increasingly important in the future.

A further new and promising research direction is the analysis of the interrelation between the SSFTA and investment activities by companies. We are pleased to present a comparative analysis of the investment provisions in different bilateral and plurilateral economic agreements made by China, which provides evidence to support an upgrade of the Sino-Swiss investment framework. Furthermore, we open up an area of inquiry into the putative impacts of FTAs on investment.

With this 10th anniversary edition of the SSFTA report, we wish to further develop the academic Sino-Swiss dialogue to cover the many aspects of our bilateral economic relationship by engaging with all SSFTA stakeholders, including trading and investing firms, consultants, business associations, and policymakers.

We hope that you find the report a stimulating read and look forward to decisive action to further develop the Sino-Swiss economic relationship and bilateral friendship!

1.1 主编前言：中国-瑞士自由贸易协定10周年,研究背景和意义

我们非常高兴能在庆祝中瑞自由贸易协定（中瑞FTA）十周年之际发布这份报告。

中瑞FTA的谈判始于2011年,于2013年7月6日由瑞士联邦委员约翰·施奈德-阿曼 (Johann Schneider-Ammann) 和中国商务部部长高虎城签署。自2014年7月1日生效以来,中瑞FTA已经成为瑞士出口商在欧洲以外地区最为常用的自由贸易协定。

与报告的前身——《中国-瑞士自由贸易协定：2018年学术评估报告》一样,我们不是从理论角度出发来分析中瑞FTA,而是从协定的实际影响以及对两国消费者、企业和决策者日常重要性的角度出发。

由于中瑞FTA涵盖了广泛的问题,从商品和服务贸易,促进投资,竞争和知识产权保护,到瑞士和中国政府之间多领域的经济和技术合作,我们集中专注于选定的几个方面。

鉴于单边举措在自由贸易协定的世界中依然具有相关性,我们专门撰写了一章来分析中国通过降低关税和取消限制,不断提高贸易和投资的开放。

中瑞FTA的核心是产品关税减让。一些关税在中瑞FTA生效第一天就被取消了,大多数关税在五年或十年的时间内逐步削减。这意味着今天我们已经接近实现瑞士和中国之间的自由贸易。因此,对瑞士及中国的出口商和进口商利用中瑞FTA的情况进行分析非常重要。虽然大部分潜在收益已经实现,但仍有改进的余地。

出于这个原因,我们投入了大量的研究资源来确定中瑞FTA的利用率,并分析中瑞FTA被利用和未被利用的原因。对于这两个国家,我们确定了影响企业利用中瑞FTA的决策和相关经验的关键因素,并对从业者进行了调研,以了解未利用的决定因素。我们看到瑞士和中国的公司都非常感兴趣并愿意报告他们在利用中瑞FTA方面的经验,我们非常感谢他们提供的宝贵想法。

本报告的撰稿人努力提供独到的见解。例如,首次对中国和瑞士之间的服务贸易进行了分析,特别关注了信息通信技术、知识产权使用费、金融服务、以及可数字交付的服务。服务贸易的话题在未来将引起越来越多的关注。

另一个新的和有前景的研究方向是分析中瑞FTA与公司投资活动之间的相互关系。我们很高兴在报告中展示了中国不同双边和诸边协定中的投资条款的比较分析,这为支持中瑞投资框架的升级提供了证据。此外,我们开启了一个探索领域——研究自由贸易协定对投资的推定影响。

通过这一中瑞FTA10周年报告,我们希望通过与所有中瑞FTA利益相关方的互动,包括贸易和投资公司、咨询师、商业协会和政策制定者,进一步发展中瑞学术对话,以涵盖双边经济关系的多个方面。

我们希望您能从报告的阅读中感受到鼓舞和启发,并期待您采取果断行动,进一步发展中瑞经济关系和双边友谊!

1.2 Executive Summary

The Sino-Swiss Free Trade Agreement (SSFTA) 10 Years On:
Benefits for Swiss and Chinese Exporters, but still Room for Improvement

The impact of any free trade agreement is evidenced by its utilization rates. The analysis of the utilization rates and deficits of the SSFTA constitutes the core of this report (in Part II). Chapter 2.1 details the methodology to calculate SSFTA utilization rates which has been further perfected by the contributing Chinese and Swiss researchers.

Part III of the report supplies an extended analysis of the Swiss-Sino economic relationship and looks at new developments and novel areas of inquiry that are relevant to both practitioners and policymakers such as the trade in services and FDI.

A major finding of the 2023 report is that an increasing number of **Swiss exporters** use the SSFTA (see Chapter 2.3). The overall SSFTA utilization rate has increased by 13%, from 58% to 71% over the last five years. As a result, Swiss firms have saved USD 220 million in 2022 (up from USD 70 million in 2018). The remaining savings potential is contingent on many factors including the growth of bilateral trade in the coming years, but it might be estimated to be as high as USD 200 million.

Chapter 2.2 finds that for **Chinese exporters**, the SSFTA utilization rate has slightly decreased over the last five years with a fall in the overall rate of almost 3%, from 42.2% to 39.3%. The reasons for this non-utilization, as well as some of the success stories, constitute Chapters 2.4-2.7 of the report. The various analyses hold normative implications for firms and practitioners.

One reason for the low SSFTA utilization rates by Chinese exporters is that key items such as computers, smartphones, and other IT goods are already tariff-free and so there is no incentive to use the Sino-Swiss agreement. However, all major export positions show lower SSFTA utilization rates than five years ago, including machinery, chemical products, and textiles. Consequently, Chinese exporters and the Swiss importers of Chinese goods still pay more than CHF 400 million in annual customs duties, which is more than CHF 100 million more than were paid five years ago. At the same time and due to a significant increase in trade volume, SSFTA savings have increased despite a lower utilization rate, from CHF 147.8 million to CHF 212.9 million.

When looking in more detail at the breakdown of **Swiss exports to China**, one finds that a total of USD 4 billion, or 25.1% of total exports including medicines and medical devices or IT goods, are already tariff free. Other sectors such as machinery and instruments have contributed to increasing the SSFTA utilization rate by more than 10%, while the significant amount of watch exports have an extremely high utilization rate of 93% (up from 91% in 2018). Interestingly, Swiss exports with comparatively lower trade volumes also benefit significantly from the SSFTA, e.g., coffee, dairy products, sugar confectionery, metal products, vehicle parts, and certain textiles. As a consequence of increased trade volumes, it could be tentatively extrapolated that Swiss exporters and the Chinese importers of Swiss goods pay close to USD 200 million in annual customs duties, about USD 100 million more than five years ago.

The importance of the SSFTA to the two countries is self-evident. This report provides evidence that the SSFTA has achieved remarkable results in the past 10 years. Many Swiss and Chinese enterprises have seized the new opportunities brought by the SSFTA and continuously expanded the scale of trade and investment that has resulted from the solid economic cooperation between the two countries. Chapter 3.1 describes how exporters in Switzerland and other nations are poised to benefit from **China's unilateral measures on trade and investment**. In Chapter 3.2, it is shown that the fast-growing potential of China's service sector might take center stage in the bilateral relationship given Switzerland's competitiveness in the trade in services, currently supporting a surplus of CHF 1.7 billion. Since trade and investment often go hand in hand, Chapter 3.3 provides readers with a global analysis of **China's FTA investment provisions**, providing unique insights into China's policy-making strategies. Finally, Chapter 3.4 hones in on the 'learning-by-exporting' assumption where trade is the basis for firm internationalization.

The Chinese contributors to the SSFTA report emphasize their country's commitment to measures that promote high-level opening up, which will inject further impetus into SSFTA cooperation. Here, the report connects the Sino-Swiss commercial relationship with the big economic picture. At present, globalization is at an important crossroads between re-globalization and de-globalization. Geopolitics, post-pandemic economic recovery, income inequality, and climate change are just some of the grand challenges that the countries of the world are facing. Dr Ngozi Okonjo-Iweala, Director-General of the WTO, writes in her Foreword to the World Trade Report 2023 that: "Solving today's challenges actually requires more global openness, integration and cooperation, not less".

1.2 概要

中瑞自由贸易协定10年：
对瑞士和中国出口商的好处仍有提升空间

利用率是任何一个自由贸易协定影响的体现。对中瑞FTA利用率经验和不足的分析构成了本报告(第二部分)的核心。第2.1章详细介绍了计算中瑞FTA利用率的方法，该方法经过了中国和瑞士研究者的进一步完善。

报告第三部分对中瑞经济关系进行了延伸分析，着眼于与从业者和政策制定者相关的新发展和新的研究领域，如服务贸易和外商直接投资。2023年报告的一个主要发现是，越来越多的瑞士出口商使用中瑞FTA(见第2.3章)。在过去五年中，中瑞FTA的整体利用率增加了13%，从58%增加到71%。因此，瑞士企业在2022年总共节省了2.2亿美元(高于2018年的7000万美元)。剩余的节约潜力取决于许多因素，包括未来几年双边贸易的增长，但估计可能高达2亿美元。

第2.2章发现，对于中国出口商而言，中瑞FTA利用率在过去五年中略有下降，总体利用率下降了近3%，从42.2%下降到39.3%。这种未利用的原因以及一些成功案例构成了报告第2.4-2.7章。多层次的分析对企业和从业人员具有规范性意义。

中国出口商对中瑞FTA利用率低的一个原因是，电脑、智能手机和其他IT产品等关键物品已经免关税，因此企业没有动力使用中瑞FTA。然而，所有主要的出口产品类别都显示出低于 五年前中瑞FTA的利用率，包括机械，化学产品和纺织品。因此，中国出口商和进口中国商品的瑞士进口商每年仍需缴纳超过4亿瑞士法郎的关税，比五年前增加增加了1亿瑞士法郎。 与此同时，随着贸易量的大幅增加，尽管利用率较低，中瑞FTA的关税节约有所增加，从1.478亿瑞士法郎增加到2.129亿瑞士法郎。

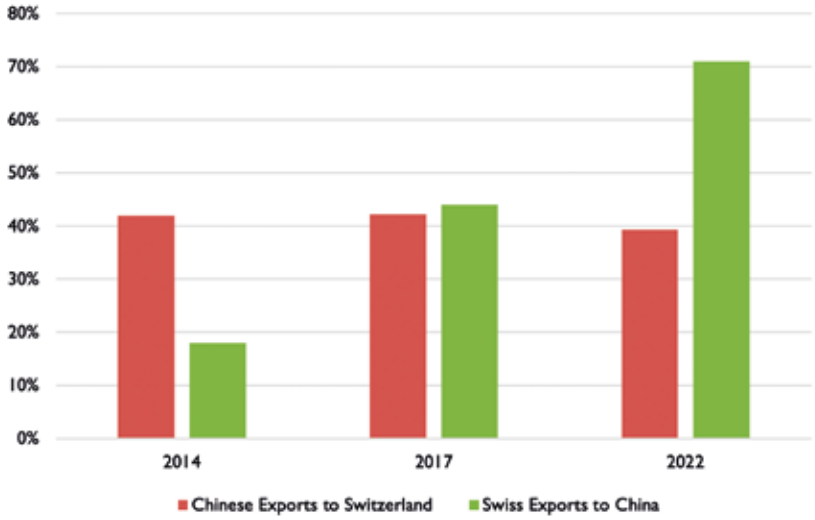
更详细地考察瑞士对中国出口的明细数据可以发现，共有40亿美元已享受零关税，占包括药品、医疗设备或IT产品在内的产品出口总额的25.1%。机械和仪器等其他行业为中瑞FTA利用率提高了10%以上做出了贡献，同时大量的手表出口具有93%的极高利用率(高于2018年的91%)。有趣的是，贸易额相对较低的瑞士出口产品也从中瑞FTA中受益匪浅，例如咖啡、乳制品、糖果、金属制品、汽车零部件和某些纺织品。由于贸易量的增加，可以初步推断，瑞士的出口商和进口瑞士商品的中国进口商每年将支付近2亿美元的关税，比五年前增加约1亿美元。

中瑞FTA对两国的重要性是不言而喻的。这份报告提供了中瑞FTA在过去10年中取得了显著成果的证据。许多瑞士和中国企业抓住中瑞FTA带来的新机遇，不断扩大两国通过稳固的经济合作所带来的贸易和投资规模。第3.1章描述了瑞士和其他国家的出口商如何准备从**中国贸易和投资的单边开放措施**中受益。第3.2章表明，鉴于瑞士在**服务贸易**中的竞争力，瑞士目前有17亿瑞士法郎的对华服务贸易顺差，而中国服务 业快速增长的潜力可能成为双边关系关注的焦点。由于贸易和投资往往齐头并进，第3.3章为读者提供了对**中国自由贸易协定投资条款**的全球性分析，为中国的政策制定战略提供了独特的见解。最后，第3.4章阐述了“出口学习”假设，即贸易是企业国际化的基础。

对该中瑞FTA报告的中方贡献者强调，中国致力于促进高水平对外开放的措施，这将进一步为中瑞FTA合作注入动力。在此，报告将中瑞商业关系与大的经济图景联系起来。当前，全球化正处于再全球化与去全球化的重要十字路口。地缘政治、疫情后的经济复苏、收入不平等和气候变化仅仅是世界各国正在面临的部分重大挑战。世贸组织总干事恩戈齐·奥孔乔-伊韦拉(Ngozi Okonjo-Iweala) 博士在《2023年世界贸易报告》前言中写道：“解决当今的挑战实际上需要更多的全球开放、一体化与合作，而不是更少”。

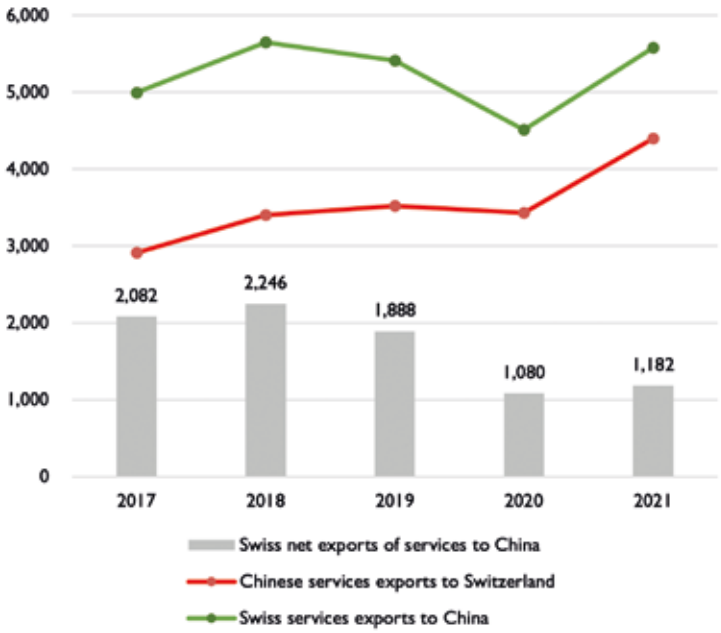
Selected highlights

Figure 1.1: Sino-Swiss FTA adjusted utilization rate (AUR)



Source: Data retrived from 2023 and 2018 Sino-Swiss FTA reports and their respective AUR calculation methodologies.

Figure 1.2: Sino-Swiss trade in services and Switzerland's net export surplus (2017-2021)



Data source: OECD-WTO Balanced Trade in Services Database.

Chinese exporters' FTA savings have increased despite a lower FTA utilization, from 148 to 213 Mio CHF

Swiss firms exporting to China saved 220 Mio USD in 2022, up from 70 Mio USD in 2018

SSFTA utilization 2022: The estimated savings for Swiss exporters (unofficial calculations)

1. Agricultural products (HS01-24) have estimated realized savings of approximately USD 10 million (with a remaining estimated savings potential of approximately USD 4 million)

2. Chemical products (HS28-38, excluding HS30) have estimated realized savings of approximately USD 16 million (with a remaining estimated savings potential of approximately USD 15 million)

3. Pharmaceutical products (HS30) have estimated realized savings of approximately USD 1.4 million (with a remaining estimated savings potential of approximately just under USD 1 million)

4. Textiles (HS50-63) have estimated realized savings of approximately USD 3.2 million (with a remaining estimated savings potential of approximately USD 2 million)

5. Metal products, machinery, vehicles (HS72-89) have estimated realized savings of approximately USD 61 million (with a remaining estimated savings potential of approximately USD 76 million)

6. Instruments (HS90) have estimated realized savings of approximately USD 6 million (with a remaining estimated savings potential of approximately USD 4 million)

7. Watches (HS91) have estimated realized savings of approximately USD 133 million (with a remaining estimated savings potential of approximately USD 46 million)

Source: Patrick Ziltener's own calculations based on publically available data.

PART II

The FTA at the center of Sino-Swiss economic relations

第二部分

FTA处于中瑞经济关系的中心地位

2.1 The Sino-Swiss FTA: Data and Methodology

by Patrick Ziltener and Jiemin Liu

(1) Description of Trade Data

For the economic analysis of the Sino-Swiss FTA (SSFTA), we have been able to use comprehensive data from both the General Administration of Customs of the People's Republic of China (GACC) and the Swiss Federal Office for Customs and Border Security (FOCBS). This allows us to explore in detail what the two countries trade, how the SSFTA is utilized and to what extent the SSFTA can facilitate bilateral trade. For each international shipment that arrives in China or Switzerland, the date, value, weight, and duties paid are recorded. In addition, the product category is noted using the Harmonized Commodity Description and Coding System ('Harmonized System', or 'HS'), a multipurpose international product nomenclature developed by the World Customs Organization (WCO), which is comprised of more than 5,000 commodity groups identified by a six-digit HS

Table 2.1: Sino-Swiss Trade Balance: Reported Imports by FOCBS, GACC and UNCTAD

Trade in 2022	FOCBS*	GACC*	UNCTAD*†	UNCTAD†	Sino-Swiss FTA Academic Report 2023
Chinese Exports to Switzerland	$ 19,881 million		$ 21,381 million	$ 21,554 million	$ 19,881 million
Swiss Exports to China		$ 15,604 million	$ 15,791 million	$ 49,908 million	$ 15,604 million
Trade balance	$ 4,277 million		$ 5,590 million	$ 28,354 million	$ 4,277 million
	(= Chinese Surplus)		(= Chinese Surplus)	(= Swiss Surplus)	(= Chinese Surplus)

Trade in 2017	FOCBS*	GACC*	UNCTAD*†	UNCTAD†	Sino-Swiss FTA Academic Report 2018
Chinese Exports to Switzerland	$ 13.3 billion		$ 13,217 million	$ 13,305 million	$ 13.3 billion
Swiss Exports to China		$ 9.5 billion	$ 9,798 million	$ 33,019 million	$ 9.5 billion
Trade balance	$ 3.8 billion		$ 3,419 million	$ 19,714 million	$ 3.8 billion
	(= Chinese Surplus)		(= Chinese Surplus)	(= Swiss Surplus)	(= Chinese Surplus)

Note 1: Chinese Exports to Switzerland in 2017 (the second part) are quoted from Casas, T., et al (2018). *Sino-Swiss Free Trade Agreement – 2018 Academic Evaluation Report*. Basel: MDPI. p.13.
*Columns with an asterisk indicate that commodities in HS 7108.12 as well as HS chapters 98 and 99 are excluded.
† Data source: Authors, based on data respectively from FOCBS, GACC; UNCTAD. (2023, June). Retrieved from https://comtrade.un.org/data

code and is further implemented through the use of an additional two-digit national extension providing approximately 10,000 different goods with unique eight-digit HS codes for WCO members. For our analysis, we use yearly aggregate values for each product.

An important remark to make concerning the trade data is that we always use the respective information on recorded imports. That is, for Swiss exports to China we rely on GACC's data on imports. In turn, we use FOCBS' data on Chinese exports to Switzerland. This is in line with standard practice in academic research and is justified by the higher quality of import statistics. Given that they are potentially subject to tariffs, the accuracy of recording information for imported products is significantly higher.

Four more points are worth noting. First, all Swiss imports are recorded in Swiss Francs (CHF) while Chinese imports are valued in US Dollars (USD). According to the United Nations Conference on Trade and Development (UNCTAD), the exchange rate for 2022 is 1.00 USD=0.95 CHF, but for this work we treat 1 USD = 1 CHF for simplification purposes.

Second, as many Swiss exports to China are 'non-monetary, unwrought gold, but not in powder or in semi-manufactured forms' (HS 7108.12) and undeclared goods (HS 98 & 99) which have been subject to a wide range of price fluctuations over the past decade, we omit these from all statistics.

Third, although most Sino-Swiss bilateral trade is within the scope of this research on the utilization of SSFTA rates, some types of trade are excluded because they are subject to other rates depending on specific and respective trade terms. For instance, 'goods of Swiss or Chinese origin' are excluded when reimported by their home countries as they are not applicable (they cannot utilize the SSFTA) according to Rules of Origin (RO). In addition, as trade categories slightly differ between Switzerland and China, some types of trade that are not designed to apply for preferential SSFTA rates are also not taken into consideration. For instance, some goods are excluded, such as those taxed under 'customs relief' rates (which are not defined for the SSFTA but for other purposes in Switzerland).

The final comment on the data concerns the Sino-Swiss trade balance. As is shown in **Table 2.1**, the adjustment of the commodity range mentioned above results in a change to the surplus country, which can be seen in the bilateral import statistics of UNCTAD.

(2) Calculation of FTA Utilization Rates

When examining the success of an FTA and estimating the effect of a trade agreement on bilateral trade flows, a key determinant of the effect's magnitude is whether the FTA is successfully utilized by firms. Pomfret et al. (2010) show that FTA utilization rates can be fairly low in the presence of bureaucratic complexities or multilateral trade liberalization.

In our study, we measure utilization rates for trade flows between China and Switzerland. This shows to what extent firms make use of the SSFTA. There are two different types of utilization rate: The General Utilization Rate (GUR) and the Adjusted Utilization Rate (AUR). As shown by the GUR and AUR equations in **Figure 2.1**, the difference is that for the AUR we reduce the denominator by imports with lower non-SSFTA tariff rates, most of which are zero most-favored-nation (MFN) tariffs meaning that there is no incentive to apply for preferential SSFTA treatment.

References

Pomfret, R., Kaufmann, U., & Findlay, C. (2010, August). *Use of FTAs in Australia*. RIETI Discussion Paper Series 10-E-042, pp. 1-9. Retrieved from https://www.rieti.go.jp/jp/publications/dp/10e042.pdf

Figure 2.1: Calculations of the General Utilization Rate (GUR) and Adjusted Utilization Rate (AUR)

$$\text{GUR (\%)} = \frac{\text{Import benefitting from FTA}}{\text{Total Imports}} \times 100\%$$

$$\text{AUR (\%)} = \frac{\text{Import benefitting from FTA}}{\textit{Total Imports} - \textit{Imports with lower non-FTA Tariff Rates}} \times 100\%$$

2.2 The Sino-Swiss FTA – Utilization Rate Analysis: Chinese Exports to Switzerland

by Jiemin Liu and Patrick Ziltener

(1) According to the data made available by Federal Office for Customs and Border Security (FOCBS) and analyzed in this chapter, Switzerland's import value from China and its 'realized savings' from the Sino-Swiss Free Trade Agreement (SSFTA) have increased by 51.6% and 44.0% respectively from 2017 to 2022 (see **Table 2.2** for data details). By utilizing the SSFTA, the ratio of 'Realized Savings/Potential Savings' in 2022 is 52.7%, 3.4% higher than in 2017, while the Adjusted Utilization Rate (AUR) of the SSFTA in 2022 is 39.3%, 2.9% lower than in 2017. The five major sectors of Switzerland's imports from China (or Chinese exports) if classified according to Harmonized System's chapter level

Table 2.2: Chinese exports and SSFTA utilization in key sectors, 2022 and 2017

	Sector (HS Chapter)	Trade Value (in million CHF)	Utilizing SSFTA (in million CHF)	Average MFN Duty	Average FTA Duty	Potential Savings (in million CHF)	Realized Savings (in million CHF)	Adjusted Utilization Rate (AUR)
Chinese Exports to Switzerland in 2022	Electrical Machinery (85)	5,153	704	0.2%	0.0%	23.9	14.9	46.5%
	Machinery (84)	3,519	435	0.1%	0.0%	15.2	10.9	51.3%
	Chemicals (29)	1,609	424	0.1%	0.0%	2.2	1.4	42.9%
	Non-knitted Apparel (62)	1,177	192	6.0%	0.0%	92.2	33.3	16.3%
	Knitted Apparel (61)	899	187	4.1%	0.0%	47.8	18.8	20.8%
	Rest	7,523	2,700	1.9%	0.1%	222.6	133.5	42.3%
	Total	**19,881**	**4,643**	**1.3%**	**0.0%**	**403.8**	**212.9**	**39.3%**
Chinese Exports to Switzerland in 2017	Electrical Machinery (85)	3,406	384	1.5%	0.0%	14.5	8.9	50.3%
	Machinery (84)	2,286	290	1.2%	0.0%	7.8	4.9	54.0%
	Chemicals (29)	736	263	0.2%	0.0%	1.8	1.4	58.5%
	Non-knitted Apparel (62)	1,008	214	6.8%	0.0%	82.9	29.3	21.3%
	Knitted Apparel (61)	720	180	4.6%	0.0%	43.7	18.8	25.1%
	Rest	4,954	1,890	1.3%	0.0%	149.0	84.6	45.5%
	Total	**13,110**	**3,222**	**3.5%**	**0.0%**	**299.6**	**147.8**	**42.2%**

Note 1: Average MFN Duty and Average FTA Duty are calculated by using the aggregate duties levied on an 8-digit HS Code (also calculated according to their specific tariff rates respectively), correspondingly divided by their import value. Hence, an HS code without any import records is not taken into consideration.
Note 2: Chinese Exports to Switzerland in 2017 (the second part) are sourced from Casas, T., et al. (2018). *Sino-Swiss Free Trade Agreement – 2018 Academic Evaluation Report*. Basel: MDPI. p. 24.
Data source: Authors, based on data from Federal Office for Customs and Border Security (FOCBS) - March 2023.

(2-digit HS Code) are electrical machinery (HS 85), machinery (HS 84), chemicals (HS 29), non-knitted apparel (HS 62), and knitted apparel (HS 61), though the 3rd and the 4th placed sectors interchanged their ranks due to the rapid increase in the import of chemicals in 2022. This overall slight decrease in the total AUR is the result of a lower utilization rate in all of these key sectors (HS 29, 61, 62, 84, 85) and the 'rest', compared to 2017. Most significant is the decrease of the AUR in the export of chemicals (HS 29). This should be investigated further.

(2) When zooming in at the HS chapter level and sorting by China's export (Switzerland's import) value in 2022, China's top 20 export value sectors add up to CHF 18.3 billion, amounting to 91.9% of the total value of Chinese exports to Switzerland, while their average AUR is 38.5%. Some sectors, including machinery (HS 84), metal articles (HS 73), certain textiles (HS 63) and wood articles (HS 44), etc., have AURs that are above 50%. However, there are other sectors including apparel (HS 61, 62), vehicles (HS 87), footwear (HS 64), optical instruments & apparatus (HS 90), etc., whose AURs are below 30%. Pearls & jewellery (HS 71) has the lowest AUR of only 8.0% (but is among China's top 20 export sectors in terms of value) as is depicted in **Table 2.3**.

(3) As to specific cases of interest, and as is reflected in **Table 2.4**, China exported clocks, watches & parts (HS 91) with a value of CHF 580 million to Switzerland, equal to 2.9% of the total Chinese export value for this HS category. This sector's AUR is 63.0%, 23.7% higher than the average AUR. Digging deeper into the numbers, cases for watches (HS 9111.2000) with a trade value of CHF 209.7 million and an AUR of 71.9%, and watch straps (HS 9113.2000) with a trade value of CHF 156.2 million and an AUR of 78.2%, suggest why the clocks, watches & parts category (HS 91) has a relatively high AUR. Another interesting case is aluminum articles (HS 76), which has an export value of CHF 212.7 million, 1.1% of the total Chinese export value, and enjoys the highest AUR of 82.9% among China's top 20 export items.

Meanwhile, China exported apparel worth CHF 2.08 billion (HS61, 62) to Switzerland, equal to 10.4% of the total Chinese export value. These two sectors' AURs are 20.8% and 16.3% respectively, more than 50% lower than the average AUR. Women's overcoats (HS 6202.4000) with a trade value of CHF 237.8 million and an AUR of 9.3%, knitted man-made fibre jerseys (HS 6110.3000) with a trade value of CHF 127 million and an AUR of 17.3%, and knitted cotton jerseys (HS 6110.2000) with a trade value of CHF 99.6 million and an AUR of 16.16%, together partly exemplify why apparel has an extremely low average AUR. Another example is motor vehicles (HS 8703.8030) with a trade value of CHF 404.8 million but an AUR of only 8.1%, substantially lower than its sector AUR of 30%.

Yet even if some product groups enjoy relatively higher AURs than the total level of 39.3%, many commodities still have relatively low AURs, signifying that these diverge greatly at the commodity level. For example, electrical machinery (HS 85), China's largest export sector with a value of CHF 5.2 billion and accounting for 25.9% of total Chinese exports, has an AUR of 46.5%. There are five commodities in this sector ranking in China's top 20, with a total export value of CHF 606.8 million, 3.1% of Chinese exports. Nevertheless, the AURs of lithium-ion accumulators (HS 8507.6000), electrical apparatus for switching electrical circuits (HS 8537.1092) and electric conductors (HS 8544. 4229) are all below the sector's average AUR. In addition, the AUR of machinery 'generating sets other than powered by spark-ignition internal combustion piston engine and wind-powered' (HS 8505.1100) with a significant trade value of CHF 106.4 million is close to zero.

Organic chemicals (HS 29), China's third largest export sector with a value of CHF 1.61 billion, accounting for 8.1% of total Chinese exports, has an AUR of 42.9%. Yet certain chemicals (heterocyclic compounds, HS 2933.9980 and 2933.5990) with a combined value of CHF 319.8 million and accounting for 1.6% of Chinese exports, have AURs of only 5.3% and 14.9% respectively, which are both substantially lower than their sector's overall AUR.

Table 2.3: China's top 20 export sectors and their SSFTA utilization rates, 2022

Sector (HS Chapter)	Nomenclature	Trade Value (in million CHF)	Utilization of SSFTA (in million CHF)	Potential Savings (in million CHF)	Realized Savings (in million CHF)	Trade Value (%)	AUR
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers; parts	5,153	704	23.9	14.9	25.9%	46.5%
84	Nuclear reactors, boilers, machinery & mechanical appliances; parts.	3,519	435	15.2	10.9	17.7%	51.3%
29	Organic chemicals	1,609	424	2.2	1.5	8.1%	42.9%
62	Articles of apparel and clothing accessories, not knitted or crocheted	1,177	192	92.2	33.3	5.9%	16.3%
61	Articles of apparel and clothing accessories, knitted or crocheted	899	187	47.8	18.8	4.5%	20.8%
87	Vehicles other than railway or tramway rolling-stock; parts	773	230	13.8	6.8	3.9%	30.0%
94	Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings; luminaires and lighting fittings, not elsewhere specified or included; illuminated signs, illuminated name-plates and the like; prefabricated buildings	710	131	13.8	6.5	3.6%	38.7%
91	Clocks and watches; parts	580	365	3.0	2.1	2.9%	63.0%
95	Toys, games and sports requisites; parts	572	187	14.7	8.0	2.9%	38.9%
64	Footwear, gaiters and the like; parts	571	108	20.8	9.3	2.9%	18.8%
90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts	542	39	1.7	0.7	2.7%	20.2%
39	Plastics and articles thereof	511	248	19.8	14.3	2.6%	49.5%
73	Articles of iron or steel	398	212	12.7	8.3	2.0%	53.2%
42	Articles of leather; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silk-worm gut)	348	128	11.7	6.7	1.8%	36.8%
76	Aluminium and articles thereof	213	176	10.6	9.5	1.1%	82.9%
63	Other made up textile articles; sets; worn clothing and worn textile articles; rags	196	101	40.9	26.3	1.0%	51.7%
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coin	152	12	2.0	0.7	0.8%	8.0%
44	Wood and articles of wood; wood charcoal	119	66	2.9	1.5	0.6%	55.4%
82	Tools, implements, cutlery, spoons and forks, of base metal; parts thereof of base metal	115	56	3.9	2.5	0.6%	49.1%
83	Miscellaneous articles of base metal	112	45	3.3	1.7	0.6%	40.0%
Top 20		18,269	4,047	356.8	184.1	91.9%	38.5%
Rest		1,612	596	47.0	28.8	8.1%	46.0%
Total		**19,881**	**4,643**	**403.8**	**212.9**	**100.0%**	**39.3%**

Note: Listed in descending order by trade value.
Data source: Authors, based on data from Federal Office for Customs and Border Security (FOCBS) - March 2023.

Table 2.4: China's top 20 export commodities and their SSFTA utilization rates, 2022 (MFN Rate≠0)

HS Code	Nomenclature	Trade Value (in million CHF)	Trade Value (%)	AUR
8703.8030	Motor cars and other motor vehicles principally designed for the transport of persons, incl. station wagons and racing cars, with only electric motor for propulsion, weighing > 1600 kg each	405	2.0%	8.1%
6202.4000	Women's or girls' overcoats, car-coats, capes, cloaks, anoraks, incl. ski jackets, wind-cheaters, wind-jackets and similar articles, of man-made fibres	238	1.2%	9.3%
9503.0090	Toys; reduced-size 'scale' models and similar recreational models, puzzles of all kinds	219	1.1%	30.7%
9111.2000	Cases for wrist-watches, pocket-watches and other watches of headings 9101 or 9102, incl. stop-watches, of base metal	210	1.1%	71.9%
2933.9980	Heterocyclic compounds with nitrogen hetero-atom[s] only	208	1.0%	5.3%
8507.6000	Lithium-ion accumulators	196	1.0%	36.6%
6404.1900	Footwear with outer soles of rubber or plastics and uppers of textile materials	173	0.9%	21.1%
9113.2000	Watch straps, watch bands and watch bracelets, and parts thereof, of base metal	156	0.8%	78.2%
3926.9000	Articles of plastics and articles of other materials of heading 3901 to 3914	146	0.7%	33.0%
4202.9200	Travelling-bags, insulated food or beverage bags, toilet bags, rucksacks, shopping-bags, map-cases, tool bags, sports bags, jewellery boxes, cutlery cases, cases for binocular, camera, musical instrument, guns, holsters and similar	143	0.7%	41.2%
6110.3000	Jerseys, pullovers, cardigans, waistcoats and similar articles, of man-made fibres, knitted or crocheted	127	0.6%	17.3%
8711.6000	Motorcycles, incl. mopeds, and cycles fitted with an auxiliary motor, with electric motor for propulsion	118	0.6%	62.3%
6402.9900	Footwear with outer soles and uppers of rubber or plastics	117	0.6%	23.9%
2933.5990	Heterocyclic compounds with nitrogen hetero-atom(s) only, containing a pyrimidine ring, whether or not hydrogenated, or piperazine ring in the structure	112	0.6%	14.9%
8537.1092	Electrical apparatus for switching electrical circuits, or for making connections to or in electrical circuits, for a voltage <= 1.000 V, weighing not more than 50 kg each	110	0.6%	42.4%
8502.3900	Generating sets other than powered by spark-ignition internal combustion piston engine and wind-powered	106	0.5%	0.0%
6110.2000	Jerseys, pullovers, cardigans, waistcoats and similar articles, of cotton, knitted or crocheted	100	0.5%	16.2%
8505.1100	Permanent magnets and articles intended to become permanent magnets after magnetization, of metal	99	0.5%	80.6%
8544.4229	Electric conductors for a voltage > 80 V but =< 1000 V, insulated, fitted with connectors	95	0.5%	41.0%
6307.9099	Made-up articles of textile materials, incl. dress patterns	79	0.4%	60.2%
Total		**3,157**	**15.9%**	**31.4%**

Note: Listed in descending order by trade value.
Data source: Authors, based on data from Federal Office for Customs and Border Security (FOCBS) - March 2023.

(4) Next, we zoom in to take a more granular look at the data at the HS chapter level, ranking the AURs from the highest to the lowest (**Table 2.5**). The aggregated value of AUR for the top 20 of China's export sectors is only CHF 1.1 billion, amounting to 5.7% of total Chinese export value, while the average AUR is 69.2%, almost double the total overall AUR. Only two product groups, clocks & watches (HS 91) and aluminum articles (HS 76) appear in both **Tables 2.3** and **2.5**. The product groups that lead in in terms of AUR, mineral fuels & waxes (HS 27), pulp of wood (HS 47), and raw hides & leather (HS 41) all enjoy AURs of above 90%, though their aggregate trade value is only CHF 17.4 million, 0.1% of Chinese export value (**Table 2.5**).

If we filter at the commodity level, mineral articles (HS 27) only contain 26 Chinese export commodities. Paraffin wax (HS 2712.2000) and anthracite (HS 2701.1100) are the only two commodities that make full or almost full use of SSFTA rates in this group, while the AURs of another eight commodities are zero, and the remaining sixteen commodities' have MFN rates of zero with no incentive to apply for SSFTA rates. The overall high AUR for mineral articles is due to the influence of the high AURs for the aforementioned two commodities. They have a trade value of CHF 9.3 million, amounting to 0.1% of Chinese export value. The remaining eight commodities in HS 27 have zero SSFTA rates and are omitted, resulting in an overall AUR for mineral articles of 96.4%, the highest of any sector. Similarly, in the wood pulp group which contains only 8 Chinese export commodities, pulp of cotton linters (HS 4706.1000) is the only commodity making almost full use (93.3%) of the SSFTA rate in the sector, while four commodities have AURs of zero, and the remaining three commodities have MFN rates of zero. Therefore, this major export commodity (CHF 6.3 million, representing 0.03% of the total Chinese export value), contributes to the 93.2% AUR of the sector.

Table 2.5: Top 20 of China's export sectors according to their SSFTA utilization rates, 2022

Sector (HS Chapter)	Nomenclature	Trade Value (in million CHF)	Utilizing SSFTA (in million CHF)	Potential Savings (in million CHF)	Realized Savings (in million CHF)	Trade Value (%)	AUR
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	11	9	0.0	0.0	0.1%	96.5%
47	Pulp of wood or of other fibrous cellulosic material; recovered (waste and scrap) paper or paperboard	6	6	0.0	0.0	0.0%	93.2%
41	Raw hides and skins (other than furskins) and leather	0	0	0.0	0.0	0.0%	92.0%
36	Explosives; pyrotechnic products; matches; pyrophoric alloys; certain combustible preparations	8	7	0.7	0.7	0.0%	88.8%
05	Products of animal origin, not elsewhere specified or included	8	1	0.0	0.0	0.0%	86.3%
76	Aluminium and articles thereof	213	176	10.6	9.5	1.1%	82.9%
16	Preparations of meat, of fish, of crustaceans, molluscs or other aquatic invertebrates, or of insects	6	3	0.1	0.1	0.0%	82.8%
19	Preparations of cereals, flour, starch or milk; pastrycooks' products	9	7	1.2	1.0	0.1%	79.7%
20	Preparations of vegetables, fruit, nuts or other parts of plants	15	12	2.1	1.9	0.1%	78.6%
86	Railway or tramway locomotives, rolling-stock and parts thereof; railway or tramway track fixtures and fittings and parts thereof; mechanical (including electro-mechanical) traffic signalling equipment of all kinds.	21	17	0.3	0.2	0.1%	77.6%
66	Umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops; parts	45	34	3.7	2.9	0.2%	75.4%
89	Ships, boats and floating structures	5	4	0.3	0.2	0.0%	74.3%
93	Arms and ammunition; parts	4	3	0.0	0.0	0.0%	73.3%
03	Fish and crustaceans, molluscs and other aquatic invertebrates	7	1	0.0	0.0	0.0%	71.0%
72	Iron and steel	86	50	0.6	0.4	0.4%	68.3%
15	Animal, vegetable or microbial fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	2	1	0.0	0.0	0.0%	65.9%
56	Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables; articles thereof	24	15	2.3	1.8	0.1%	65.0%
07	Edible vegetables and certain roots and tubers	18	4	0.4	0.2	0.1%	63.3%
91	Clocks and watches; parts	579	365	3.0	2.1	2.9%	63.0%
28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, of radioactive elements or of isotopes	73	39	0.9	0.8	0.4%	60.6%
Top 20		1,142	755	26.4	21.8	5.7%	69.2%
Rest		18,740	3,887	377.5	191.1	94.3%	36.3%
Total		**19,881**	**4,643**	**403.8**	**212.9**	**100.0%**	**39.3%**

Note: Listed in descending order by AUR.
Data source: Authors, based on data from Federal Office for Customs and Border Security (FOCBS) - March 2023.

2.3 Sino-Swiss FTA – Utilization Rate Analysis: Swiss Exports to China

by Zhikun Cui, Pengfei Zheng, Enci Wang and Patrick Ziltener

(1) According to the statistics of China Customs, China's import value from Switzerland has increased by 42.6% in the period from 2018 to 2022. The Adjusted Utilization Rate (AUR) of the Swiss-Sino FTA (SSFTA) in 2022 rose to 71.0%, 13.0% higher than in 2018 (**Table 2.6**). Based on currently available data, we estimate that the SSFTA helped to achieve more than USD 70 million in tariff reductions in 2018, rising to more than USD 220 million in 2022, equating to growth in tariff reductions of up to 214% between 2108 and 2022. According to Harmonized System's chapter level (2-digit HS Code), watches (HS 91), machinery (HS 84), jewelry (HS 71), electrical machinery (HS 85) and instruments (HS 90) are the five main sectors of Swiss exports to China (or Chinese imports) in 2022. Compared to 2018, jewelry (HS 71) has replaced chemicals (HS 29) as one the top five major sectors, and the comparative rankings of the electrical machinery (HS 85) and instruments (HS 90) sectors have also undergone certain changes (see **Table 2.6**). Overall, the notable increase in the total AUR is a result of a significantly higher rate of utilization in watches, machinery and the electrical machinery sectors (HS 91, 84, and 85) as well as lesser gains in other sectors. In particular, the growth rate of machinery (HS 84) and electrical machinery (HS 85) exceeded 10%. Watches (HS 91) maintain an AUR of over 90%. The most significant difference between 2018 and 2022 is that instruments (HS 90) actually experienced a downward AUR trend (-6%). Further analysis is needed to identify the specific reasons for this uncharacteristic decline.

Table 2.6: Swiss exports, SSFTA utilization (AUR), 2022 and 2018

	Sector (HS Chapter)	Trade Value (in million USD)	Adjusted Utilization Rate (AUR)
Swiss Exports to China in 2022	Watches (91)	3,385	93%
	Machinery (84)	1,653	59%
	Jewelry (71)	649	67%
	Electrical Machinery (85)	580	45%
	Instruments (90)	551	42%
	Rest	8,786	57%
	Total	**15,604**	**71%**
Swiss Exports to China in 2018	Watches (91)	1,996	91%
	Machinery (84)	972	39%
	Electrical Machinery (85)	434	31%
	Instruments (90)	260	47%
	Chemicals (29)	221	36%
	Rest	7,062	45%
	Total	**10,945**	**58%**

Data source: General Administration of Customs of China. Note that jewelry has replaced chemicals as a top 5 export sector between 2018 and 2022.

(2) Based on the HS chapter level, **Table 2.7** depicts the value of China's import (Switzerland's export) trade ranked according to value in 2022 and lists Switzerland's top 20 export sectors. The total value of the top 20 export sectors is USD 8.3 billion, which together account for 53% of total Swiss exports to China and have an average AUR of 72%. The AURs of 13 of these sectors are above 50%: watches (HS 91), machines (HS 84), jewelry (HS 71), organic chemicals (HS 29), iron and steel products (HS 73), tools (HS 82), colorants (HS 32), detergents (HS 34), products of cereals (HS 19), pharmaceuticals (HS 30), cocoa (HS 18), proteins (HS 35) and textile articles for industrial use (HS 59). Most of Switzerland's exports to China are manufactured or semi-finished products and the AUR value of watches (HS 91), products of cereals (HS 19) and pharmaceuticals (HS 30) exceeds 90%. Watches (HS 91), the sector with the highest trade value, has an AUR value as high as 93%, meaning that Swiss watch exporters basically take full advantage of the SSFTA to reduce tariffs. In the sectors with AURs below 50%, most have AUR values in the range of 30% to 50%. To some extent, and with the assistance of various positive measures by China, the utilization rate of the SSFTA by most Swiss export sectors has significantly increased. For example, the AUR of the electrical machinery sector (HS 85) has increased from 23% to 45%, essential oils and balms (HS 33) from 19% to 45%, and miscellaneous chemical products (HS 38) from 17% to 43% in the past 5 years.

Table 2.7: Switzerland's top 20 export sectors and SSFTA utilization rates, 2022

Sector (HS Chapter)	**Nomenclature**	**Trade Value** (in million USD)	**Trade Value** (%)	**AUR**
91	Clocks & watches, parts	3,385	21.7%	93%
84	Nuclear reactors, boilers, machines, mechanical appliances, parts	1,653	10.6%	59%
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, clad precious metals & articles thereof; imitation jewelry; coins	649	4.2%	67%
85	Motors, electrical equipment, parts; tape recorders and players, television image and sound recording and playback equipment, parts	580	3.7%	45%
90	Optical, photographic, cinematographic, metrological, testing, medical or surgical instruments and equipment, precision instruments and equipment; parts	551	3.5%	42%
33	Essential oils & balms; perfumed products, cosmetics & toiletries	306	2.0%	45%
29	Organic chemicals	231	1.5%	77%
39	Salt; Sulphur; clay & stone; gypsum, lime & cement	213	1.4%	36%
73	Iron & steel products	152	1.0%	55%
38	Miscellaneous chemical products	110	0.7%	43%
82	Tools, implements, sharps, spoons, forks & parts thereof of base metals	102	0.7%	65%
32	Tanning extracts & dye extracts; tanning acids & their derivatives; dyes, pigments & other colorants; paints, varnishes; putty & other adhesives; inks, printing inks	54	0.3%	62%
69	Ceramic products	52	0.3%	24%
34	Soaps, organic surfactants, detergents, lubricants, artificial waxes, modifying waxes, polishes, candles & the like, molding pastes, dental waxes, preparations of calcined gypsum for dental use	50	0.3%	68%
87	Vehicles other than railroad & tramway rolling-stock, parts, accessories	48	0.3%	36%
19	Products of cereals, grain flour, starch or milk; pastries & confectioneries	46	0.3%	96%
30	Pharmaceuticals	45	0.3%	79%
18	Cocoa & cocoa products	42	0.3%	94%
35	Proteins; modified starch; gums; enzymes	38	0.2%	63%
59	Impregnated, coated, covered or laminated textile fabrics; textile articles for industrial use	30	0.2%	70%
	Top 20	8,337	53.4%	72%
	Rest	7,267	46.6%	61%
	Total	**15,604**	**100%**	**71%**

Note: Listed in descending order by trade value.
Data source: General Administration of Customs of China.

(3) From a product perspective, the total value of Switzerland's top 20 exported commodities to China reached USD 5.2 billion in 2022, accounting for 33.5% of the total export volume (**Table 2.8**). Interestingly, when comparing **Table 2.8** and **Table 2.9**, there are significant differences in the AURs for export commodities (8-digit HS Code) that are in the same export sector (2-digit HS Code). For example, the export sector with the highest AUR is watches (HS 91), with the AUR of the highest commodity in this sector—ordinary automatic winding watches (HS 9102.2100)—Switzerland's export product with the highest trade volume, as high as 100%, which is 1.4 times higher than the lowest commodities in this sector (with AURs of only 70%). This means that AURs diverge greatly at the commodity level. This is also typified by the jewelry (HS 71) sector, where the AUR of golden jewelry (HS 7113.1919) is above the sector's average at 86%, while the AUR of platinum jewelry (HS 7113.1929) is only 44%, just 66% of the sector's average AUR. Five of Switzerland's top 20 export commodities are in the machinery (HS 84) sector with a total trade value of USD 516 million, but have differing AURs. The AUR value of machines for making hot drinks/cooking or heating food (HS 8419.8100) reaches 96%, the highest value in the entire sector. The AURs of valves (HS 8481.8040), valves for pneumatic transmissions (HS 8481.2020) and unloading machinery (HS 8428.9090) are also much higher than the sectors' average AUR.

Taking a more granular look at some sectors of particular interest, we find that Switzerland had a total export value to China of USD 3.4 billion for watches (HS 91) with a sector AUR of 93%, 22% higher than the average overall AUR in 2022. Some commodities have particularly high AURs such as automatic winding watches (HS 9102.2100) with a trade value of USD 1.9 billion and an AUR of 100%, automatic winding watches with cases of precious metal (HS 9101.2100) with a trade value of USD 759 million and an AUR of 84%, and watches with a mechanical display (HS 9102.1100) with a trade value USD 328 million and an AUR of 100%. Other types of watches have much lower AURs. For instance, electric wrist watches (HS 9101.1100) with a trade value of USD 220 million and an AUR of only 70%. The reasons for these significant differences in the AURs for commodities in the same sector need to be further analyzed.

Table 2.8: Switzerland's top 20 export commodities and SSFTA utilization, 2022 (MFN Rate>FTA Rate)

HS Code	Nomenclature	Trade Value (in million USD)	Trade Value (%)	AUR
91022100	Wristwatches, automatic winding	1,884	12.1%	100%
91012100	Wristwatches, automatic winding, case of precious metal	759	4.9%	84%
91021100	Electric wristwatches with mechanical display only	328	2.1%	100%
33049900	Beauty or makeup preparations & preparations for skincare (incl. sunscreen)	279	1.8%	40%
71131911	Jewelry & parts thereof of gold, plated with diamond mounted	256	1.6%	60%
71131929	Jewelry & parts thereof of platinum	221	1.4%	44%
91011100	Electric wristwatches mechanical display, case of precious metal	220	1.4%	70%
71131919	Jewelry & parts thereof of gold	154	1.0%	86%
84818040	Other valves	152	1.0%	67%
90212900	Dental fittings	143	0.9%	100%
84148049	Other air & gas compressors	133	0.9%	54%
90211000	Orthopaedic or fracture appliances	109	0.7%	100%
84198100	Machinery for making hot drinks/cooking or heating food	85	0.5%	96%
91012900	Wristwatches, with a case of precious metal	84	0.5%	73%
85011099	Electric motors of an output≤37.5 W	81	0.5%	71%
84812020	Valves for pneumatic transmissions	77	0.5%	69%
85389000	Parts for switches, fuses, panels	71	0.5%	12%
84289090	Other lifting, handling, loading or unloading machinery	69	0.4%	76%
85013100	DC motors, DC generators, of an output not exceeding 750 W	62	0.4%	27%
90189099	Parts & accessories for other medical, surgical or veterinary instruments	54	0.3%	3%
Total		**5,221**	**33.5%**	**85%**

Note: Listed in descending order by trade value.
Data source: General Administration of Customs of China.

(4) Table 2.9 shows the ranking of Swiss export sectors from the highest SSFTA AURs to the lowest. The trade value of the 20 sectors with the highest AURs account for roughly a quarter of the total value of Swiss exports to China. The five product groups with the highest AUR values are coffee and tea (HS 9), sugar (HS 17), dairy products (HS 4), flammable materials (HS 36) and chemical staple fibers (HS 55). Although the total export value from these five sectors is only USD 66 million, the significant disparity between the preferential tariff rates available through the SSFTA and most favored nation (MFN) tariff rates still results in substantial savings for exporters. Among the top 20 sectors, clocks and watches (HS 91) is the most significant for overall trade with a value of USD 3.4 billion.

In conclusion, it can be seen that for the top 20 Swiss export sectors, some sectors with small trade volumes exhibit extremely high AURs. For sectors such as coffee and tea (HS 9), sugar (HS 17), and dairy products (HS 4), the AURs have reached or are very close to 100%, demonstrating the impressive operational efficiency of traders in these fields. The watch sector (HS 91) has an AUR of 93%, but due to the substantial trade volume of this sector it still has high potential for additional realizable savings. Apart from the top 20 sectors discussed above, the average AUR of other sectors is only 53%, indicating that there is considerable room for improvement.

Note: The views expressed in this contribution are the authors' own positions.

Table 2.9: Top 20 AURs in Switzerland's exports to China, 2022

Sector (HS Chapter)	**Nomenclature**	**Trade Value** (in million USD)	**Trade Value** (%)	**AUR**
9	Coffee, tea, maté tea & flavored spices	23	0.1%	100%
17	Sugar & sugar confectionery	4	0.0%	100%
4	Dairy products; eggs; natural honey; other food animal products	26	0.2%	99%
36	Explosives; pyrotechnic products; matches; pyrotechnic alloys; products of flammable materials	0	0.0%	98%
55	Chemical fiber, staple fibers	13	0.1%	98%
19	Grain products	45	0.3%	96%
18	Cocoa & cocoa products	42	0.3%	94%
91	Clocks & watches, parts	3,385	21.7%	93%
86	Railway & tramway locomotives, vehicles, parts; railway & tramway track fixtures, parts, accessories	4	0.0%	84%
2	Meat & edible offal	13	0.1%	83%
20	Products of vegetables, fruits, nuts or other parts of plants	1	0.0%	83%
30	Pharmaceuticals	45	0.3%	79%
92	Musical instruments, parts, accessories	0	0.0%	79%
29	Organic chemicals	230	1.5%	77%
60	Knitted and crocheted fabrics	2	0.0%	75%
62	Clothing and clothing accessories, not knitted or crocheted	19	0.1%	74%
72	Iron & steel	25	0.2%	73%
68	Products of stone, plaster, cement, asbestos, mica and similar materials	17	0.1%	72%
81	Other base metals, metal ceramics & articles thereof	4	0.0%	71%
59	Impregnated, coated, covered or laminated textile fabrics; textile articles for industrial use	30	0.2%	70%
	Top 20	3,930	25.2%	91%
	Rest	11,674	74.8%	53%
	Total	**15,604**	**100.0%**	**71%**

Note: Listed in descending order by AUR.
Data source: General Administration of Customs of China, 2023.

2.4 Chinese Exports to Switzerland: Sino-Swiss FTA Success Stories and Utilization Deficits

Jiemin Liu and Patrick Ziltener

The analysis in this chapter focuses on and raises concerns about the Sino-Swiss FTA (SSFTA) adjusted utilization rates (AURs) at the commodity level (HS 8-digit) rather than chapter level (HS 2-digit, as discussed in Chapter 2.2). This allows for a much more detailed identification of specific SSFTA-related success stories and utilization deficits.

(1) To identify both success stories related to the utilization of the SSFTA and specific utilization deficits, we first have to look at those categories of goods where Switzerland has set its tariffs to zero for all WTO members (MFN rate = 0, see **Table 2.10**). In these cases, there is no incentive to utilize the SSFTA, but these categories significantly contribute to an exchange under free trade conditions for all trade participants. Among all commodities with an MFN rate of zero, China's top 20 export commodities in terms of value amount to 27.1% of Chinese export value. The lion's share of these are machinery categories (HS 84, 85) and importantly include all laptops and smartphones, which are covered by the Information Technology Agreement (ITA). The zero-tariff rate, obtained either through MFN status or by utilizing the SSFTA, is likely to be a motivator for exports.

Table 2.10: China's top 20 export commodities into Switzerland, 2022 (MFN Rate=0)

HS Code	Nomenclature	Trade Value (in million CHF)	Trade Value (%)
8471.3000	Data-processing machines, automatic, portable, weighing =< 10 kg, consisting of at least a central processing unit, a keyboard and a display	1,606	8.1%
8517.1300	Smartphones for cellular networks or for other wireless networks	993	5.0%
8517.6200	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus	765	3.9%
8541.4300	Photovoltaic cells assembled in modules or made up into panels	230	1.2%
8471.5000	Processing units for automatic data-processing machines, whether or not containing in the same housing one or two of the following types of unit: storage units, input units, output units	228	1.2%
8504.4000	Static converters	225	1.1%
8528.5200	Monitors capable of directly connecting to and designed for use with an automatic data processing machine of heading 8471	216	1.1%
8471.6000	Input or output units for automatic data-processing machines, whether or not containing storage units in the same housing	127	0.6%
8443.9900	Parts and accessories of printers, copying machines and facsimile machines	108	0.5%
8473.3000	Parts and accessories of automatic data-processing machines or for other machines of heading 8471	96	0.5%
8471.8000	Units for automatic data-processing machines	93	0.5%
8518.3000	Headphones and earphones, whether or not combined with microphone, and sets consisting of a microphone and one or more loudspeakers	92	0.5%
9504.5000	Video game consoles and machines, other than those of subheading 9504.30	90	0.5%
2934.9999	Heterocyclic compounds	82	0.4%
8443.3100	Machines which perform two or more of the functions of printing, copying or facsimile transmission, capable of connecting to an automatic data processing machine or to a network	78	0.4%
8471.7000	Storage units for automatic data-processing machines	77	0.4%
2933.9910	Heterocyclic compounds with nitrogen hetero-atom(s) only	77	0.4%
8518.2200	Multiple loudspeakers, mounted in the same enclosure	71	0.4%
8525.8900	Television cameras, digital cameras and video camera recorders	71	0.4%
8528.7100	Reception apparatus for television, whether or not incorporating radio-broadcast receivers or Sound or video recording or reproducing apparatus, not designed to incorporate a video display or screen	69	0.4%
Total		**5,392**	**27.1%**

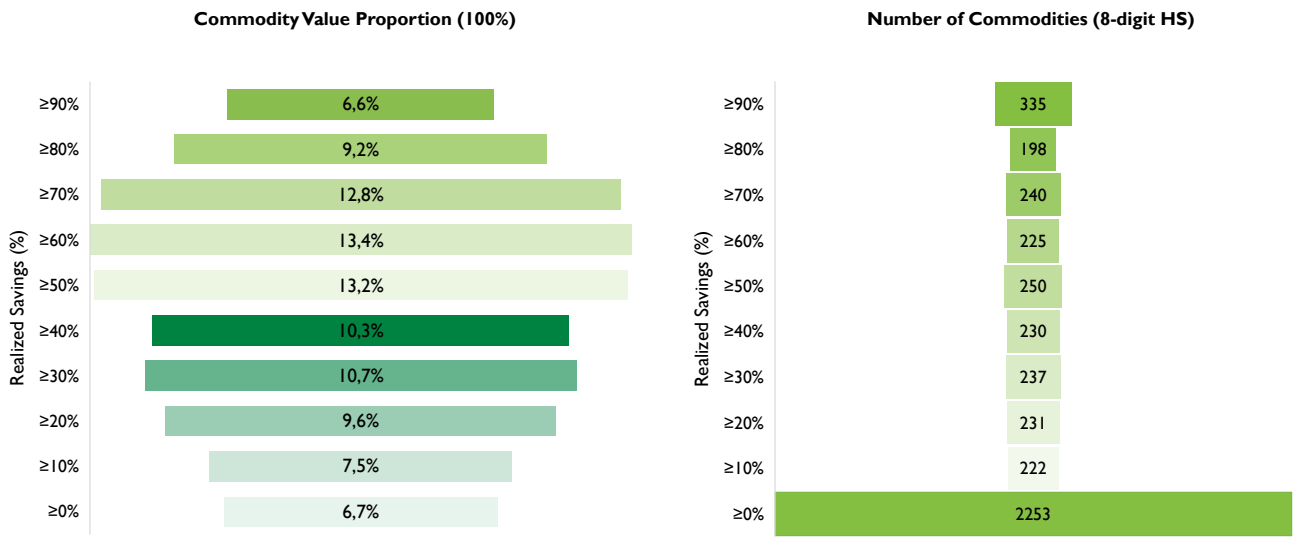
Note: Listed in descending order by trade value.
Source: Authors, based on data from Federal Office for Customs and Border Security (FOCBS) - March 2023.

(2) Amongst 6003 (8-digit HS) Chinese export commodities in 2022, there are 4421 commodities with MFN tariff having the incentive to utilize SSFTA rates. The total value of these commodities adds up to CHF 11.823 million, equivalent to 59.5% of Chinese exports. There are 1186 commodities comprising 31.5% of Chinese export value with realized savings' ratios above the average level of 52.7%. At the same time, there are still 2253 commodities comprising 6.7% of Chinese export value with extremely low realized savings' ratios below 10.0% (see **Figure 2.2**).

If we compare the realized savings' ratios with the AURs of China's top 25 export commodities with the highest realized savings, we find that although some commodities rank highly regarding realized savings by utilizing the SSFTA due to their magnitude, their realized savings' ratios and AURs are nevertheless relatively low, especially for some specific commodities such as apparel (HS 62), footwear (HS 64) and toys (HS 95) (see **Table 2.11**).

These findings are not unexpected, since previous analyses of SSFTA utilization rates also have shown that sometimes the categories with the highest savings realized are also the ones with a (very) high remaining savings potential. Textile exports from China to Switzerland are one such case: while many women's wind-jackets (HS 6202.4000) are imported duty-free into Switzerland, amounting to realized savings of CHF 5.4 million in 2022, a large proportion of these are not (i.e., over 90% of total imports in this product category have not utilized the SSFTA). This requires further research.

Figure 2.2: Realized Savings % of Commodities with Incentive to Utilize the SSFTA, 2022



Note 1: Commodities with a zero MFN tariff (including zero MFN rate and zero MFN import quantity which multiplied by an MFN rate are equal to zero) are excluded.
Note 2: Realized Savings (%)=Realized Savings/Potential Savings x 100%.
Data source: Authors, based on data from Federal Office for Customs and Border Security (FOCBS) - March 2023.

Table 2.11: China's Top 25 Export Commodities with the Highest Realized Savings, 2022 (MFN Rate≠0)

HS Code	Nomenclature	Realized Savings (in million CHF)	Realized Savings (%)	Trade Value (%)	AUR (%)
6307.9099	Made-up articles of textile materials, incl. dress patterns	13.9	71.2%	0.4%	60.2%
6202.4000	Women's or girls' overcoats, car-coats, capes, cloaks, anoraks, incl. ski jackets, wind-cheaters, wind-jackets and similar articles, of man-made fibres	5.4	25.4%	1.2%	9.3%
6210.1000	Garments made up of felt or nonwovens, whether or not impregnated, coated, covered or laminated	4.0	79.3%	0.1%	74.0%
3923.2100	Sacks and bags, incl. cones, of polymers of ethylene	3.9	94.3%	0.1%	88.3%
7606.1200	Plates, sheets and strip, of aluminium alloy, of a thickness of > 0,2 mm, square or rectangular	3.7	98.8%	0.4%	98.1%
6404.1900	Footwear with outer soles of rubber or plastics and uppers of textile materials (excl. sports & toy footwear)	3.2	52.7%	0.9%	21.1%
3918.1000	Floor coverings, whether or not self-adhesive, in rolls or in the form of tiles, and wall or ceiling coverings in rolls with a width of >= 45 cm, consisting of a layer of plastics fixed permanently on a backing of any material other than paper, the face side of which is grained, embossed, coloured, design-printed or otherwise decorated, of polymers of vinyl chloride	3.1	81.6%	0.2%	73.0%
6402.9900	Footwear with outer soles and uppers of rubber or plastics (excl. those covering the ankle, waterproof footwear of heading 6401, sports footwear and orthopaedic footwear)	3.0	55.2%	0.6%	23.9%
6110.3000	Jerseys, pullovers, cardigans, waistcoats and similar articles, of man-made fibres, knitted or crocheted	3.0	35.8%	0.6%	17.3%
6204.6290	Women's or girls' trousers, bib and brace overalls, breeches and shorts of cotton, weighing =< 750 g each	3.0	64.7%	0.2%	37.6%
4202.9200	Travelling-bags, insulated food or beverage bags, toilet bags, rucksacks, shopping-bags, map-cases, tool bags, sports bags, jewellery boxes, cutlery cases, cases for binocular, camera, musical instrument, guns, holsters and similar containers with outer surface of plastic sheeting or of textile materials	2.8	62.3%	0.7%	41.2%
9506.9100	Articles and equipment for general physical exercise, gymnastics or athletics	2.5	66.3%	0.3%	54.2%
6307.1090	Floorcloths, dishcloths, dusters and similar cleaning cloths, of textile materials	2.4	75.9%	0.1%	65.1%
9503.0090	Toys; reduced-size "scale" models and similar recreational models, puzzles of all kinds	2.2	41.3%	1.1%	30.7%
6601.1000	Garden or similar umbrellas	2.1	84.5%	0.1%	82.2%
7323.9329	Table, kitchen or other household articles, and parts thereof, of stainless steel, surface-treated	1.8	66.2%	0.3%	58.1%
8544.4229	Electric conductors for a voltage > 80 V but =< 1000 V, insulated, fitted with connectors	1.8	69.4%	0.5%	41.0%
7616.9919	Articles of aluminium	1.7	76.7%	0.2%	63.1%
6301.4000	Blankets and travelling rugs of synthetic fibres	1.6	68.5%	0.1%	60.6%
6201.4000	Men's or boys' overcoats, car-coats, capes, cloaks, anoraks, incl. ski jackets, wind-cheaters, wind-jackets and similar articles, of man-made fibres	1.6	27.5%	0.4%	13.7%
6204.6990	Women's or girls' trousers, bib and brace overalls, breeches and shorts of textile materials	1.6	64.0%	0.1%	28.8%
3926.9000	Articles of plastics and articles of other materials of heading 3901 to 3914	1.5	54.1%	0.7%	33.0%
8711.6000	Motorcycles, incl. mopeds, and cycles fitted with an auxiliary motor, with electric motor for propulsion	1.4	78.5%	0.6%	62.3%
4823.6900	Trays, dishes, plates, cups and the like, of paper or paperboard	1.4	82.6%	0.1%	78.3%
8712.0000	Bicycles and other cycles, incl. delivery tricycles, not motorized	1.4	78.7%	0.2%	54.2%
Total		**74.3**	**58.1%**	**10.1%**	**38.3%**

Data source: Authors, based on data from Federal Office for Customs and Border Security (FOCBS) - March 2023.

(3) Our analysis shows that in regard to Chinese exports to Switzerland, there are commodities that have a large amount of trade value but exhibit extremely low AURs, which raises a question about why that might be. In order to answer this question, we selected the top 200 commodities with a trade value that together adds up to CHF 8.0 billion, 40.3% of total Chinese export value, and then focused on the 20 commodities among them with the lowest AURs (see **Table 2.12**). These include machines of the type 'generating sets other than powered by spark-ignition internal combustion piston engine and wind-powered' (HS 8502.3900), chemicals ('heterocyclic compounds with nitrogen hetero-atom[s] only' HS 2933.9980), and motor vehicles ('with only electric motor for propulsion, weighing > 1600 kg each', HS 8703.8030). These three Chinese top 20 export commodities appear first in **Table 2.4** because of their high ranking in value while having extremely low rankings in terms of their AURs.

These commodities are mostly in the machinery and chemical sectors that have more technical HS classifications and a more complicated identification of origin, two factors that influence the utilization of the SSFTA. Other commodities like jewellery ('of precious metal other than silver', HS 7113.1900), sunglasses (HS 9004.1000), electrical wrist-watches (HS 9102.1100), and women's dresses (HS 61, 62) are mainly low-value consumption goods, presumably exported by numerous small and medium-sized enterprises (SMEs) in China and imported by their counterparts in Switzerland with limited applicable knowledge and awareness of utilizing the SSFTA. Their decisions on whether to utilize the SSFTA or not will also likely depend on their total costs account.

Table 2.12: China's 20 leading export commodities to Switzerland with high trade value but a low AUR, 2022 (MFN Rate≠0)

HS Code	Nomenclature	Trade Value (in million CHF)	Trade Value (%)	AUR
8479.8210	Mixing, kneading, crushing, grinding, screening, sifting, homogenising, emulsifying or stirring machines, weighing > 5000 kg each	19	0.1%	0.0%
8502.3900	Generating sets other than powered by spark-ignition internal combustion piston engine and wind-powered	106	0.5%	0.0%
7113.1900	Articles of jewellery and parts thereof, of precious metal other than silver, whether or not plated or clad with precious metal (excl. articles > 100 years old)	20	0.1%	1.4%
6204.4390	Women's or girls' dresses of synthetic fibres, embroidered, made of lace or containing lace	32	0.2%	2.3%
6204.4310	Women's or girls' dresses of synthetic fibres, not embroidered, made of lace, nor containing lace	58	0.3%	2.4%
9102.1100	Wrist-watches, whether or not incorporating a stop-watch facility, electrically operated, with mechanical display only (excl. those of precious metal)	27	0.1%	3.2%
6104.4400	Women's or girls' dresses of artificial fibres, knitted or crocheted	20	0.1%	4.0%
6112.4100	Women's or girls' swimwear of synthetic fibres, knitted or crocheted	62	0.3%	4.9%
9004.1000	Sunglasses	40	0.2%	5.0%
2933.9980	Heterocyclic compounds with nitrogen hetero-atom[s] only	208	1.0%	5.3%
6104.4300	Women's or girls' dresses of synthetic fibres, knitted or crocheted	38	0.2%	6.5%
7117.1900	Imitation jewellery, of base metal, whether or not clad with silver, gold or platinum	33	0.2%	7.4%
8703.8030	Motor cars and other motor vehicles principally designed for the transport of persons, incl. station wagons and racing cars, with only electric motor for propulsion, weighing > 1600 kg each	405	2.0%	8.1%
6204.4410	Women's or girls' dresses of artificial fibres, not embroidered, made of lace, nor containing lace	27	0.1%	8.4%
6202.4000	Women's or girls' overcoats, car-coats, capes, cloaks, anoraks, incl. ski jackets, wind-cheaters, wind-jackets and similar articles	238	1.2%	9.3%
6206.4010	Women's or girls' blouses, shirts and shirt-blouses of man-made fibres, not embroidered, made of lace, nor containing lace	31	0.2%	9.6%
8528.7200	Reception apparatus for television, colour, designed to incorporate a video display or screen	28	0.1%	10.4%
6212.1000	Brassieres of all types of textile materials, whether or not elasticated, incl. knitted or crocheted	65	0.3%	10.5%
6104.6200	Women's or girls' trousers, bib and brace overalls, breeches and shorts of cotton, knitted or crocheted	28	0.1%	10.7%
7116.2010	Objects of everyday use (e.g., ashtrays, paperweights and the like) and statuettes, of precious or semi-precious stones	47	0.2%	10.9%
Total		**1,533**	**7.7%**	**6.7%**

Note: The 20 commodities are selected from China's top 200 export commodities in terms of their trade value (trade value (%)>=0.1%) and are listed in ascending order according to their AUR.
Data source: Authors, based on data from Federal Office for Customs and Border Security (FOCBS) - March 2023.

(4) Next, we identify the Chinese export commodities (HS 8-digit level) with the highest remaining savings potential, which allows for a much more specific and detailed identification of areas where the SSFTA is being underutilized (see **Table 2.13**).

In considering China's top 25 export commodities with the highest remaining savings potential, it becomes clear that most of the commodities can be categorized into apparel (HS 61 & 62) together with footwear (HS 64) and toys (HS 95). In addition, except for motor vehicles (HS 8703.8030), frequently referred to in Chapter 2.2, brakes for motor vehicles (HS 8708.3090) ranks 13th regarding its remaining potential savings with a realized savings' ratio of only 29.7% and an AUR of 19.1%.

(5) In conclusion, our detailed analysis at the commodity level (HS 8-digit) proves that thanks to sectoral international agreements or unilateral tariff reductions, many Chinese goods are imported to Switzerland under free trade conditions, with zero duty applied. Most importantly, these agreements cover key commodities such as laptops, smartphones and other IT-related machinery which account for a large proportion of Chinese exports. This, however, does not render the SSFTA redundant or dispensable. The success stories identified show how important the SSFTA is for maintaining free trade in textiles, footwear, bags, and many metal products. In these cases, Chinese goods receive a competitive advantage in the Swiss market or compete with other FTA partner countries' on equal terms. The analysis of FTA utilization deficits shows that there are certain sectors where the SSFTA does not (yet) meet expectations in practice. First of all, this means that the import of textiles—women's dresses, blouses, trousers etc., that are almost certainly made in China—are in practice still not tariff free, a fact that is very likely to affect consumer prices in Switzerland. It is also the case that large parts of Chinese machinery exports to Switzerland are in practice still not tariff free. Further research is necessary to determine the reasons behind these roadblocks and to come up with suggestions and solutions on how to improve the functioning of the SSFTA in the future.

Table 2.13: China's Top 25 Export Commodities with the Highest Remaining Savings Potential, 2022

HS Code	Nomenclature	Remaining Savings Potential (in million CHF)	Realized Savings (%)	Trade Value (%)	AUR (%)
6202.4000	Women's or girls' overcoats, car-coats, capes, cloaks, anoraks, incl. ski jackets, wind-cheaters, wind-jackets and similar articles, of man-made fibres	15.7	25.4%	1.2%	9.3%
6307.9099	Made-up articles of textile materials, incl. dress patterns	5.6	71.2%	0.4%	60.2%
6110.3000	Jerseys, pullovers, cardigans, waistcoats and similar articles, of man-made fibres, knitted or crocheted	5.4	35.8%	0.6%	17.3%
6201.4000	Men's or boys' overcoats, car-coats, capes, cloaks, anoraks, incl. ski jackets, wind-cheaters, wind-jackets and similar articles, of man-made fibres	4.2	27.5%	0.4%	13.7%
6204.4310	Women's or girls' dresses of synthetic fibres, not embroidered, made of lace, nor containing lace	3.4	10.7%	0.3%	2.4%
9503.0090	Toys; reduced-size "scale" models and similar recreational models, puzzles of all kinds	3.2	41.3%	1.1%	30.7%
6204.6300	Women's or girls' trousers, bib and brace overalls, breeches and shorts of synthetic fibres	3.1	30.3%	0.2%	14.1%
6404.1900	Footwear with outer soles of rubber or plastics and uppers of textile materials	2.9	52.7%	0.9%	21.1%
6402.9900	Footwear with outer soles and uppers of rubber or plastics	2.4	55.2%	0.6%	23.9%
6204.4390	Women's or girls' dresses of synthetic fibres, embroidered, made of lace or containing lace	2.3	7.3%	0.2%	2.3%
6104.6300	Women's or girls' trousers, bib and brace overalls, breeches and shorts of synthetic fibres, knitted or crocheted	2.2	36.9%	0.2%	16.2%
8703.8030	Motor cars and other motor vehicles principally designed for the transport of persons, incl. station wagons and racing cars, with only electric motor for propulsion, weighing > 1600 kg each	2.2	11.4%	2.0%	8.1%
8708.3090	Brakes and servo-brakes and their parts, for motor cars and other motor vehicles designed for the transport of persons, motor vehicles for the transport of goods and special purpose motor vehicles	2.1	29.7%	0.1%	19.1%
6203.4300	Men's or boys' trousers, bib and brace overalls, breeches and shorts of synthetic fibres	2.0	25.7%	0.2%	16.2%
6204.3310	Women's or girls' jackets and blazers of synthetic fibres, not embroidered, made of lace, nor containing lace	1.9	35.2%	0.1%	14.9%
6102.3000	Women's or girls' overcoats, car coats, capes, cloaks, anoraks, incl. ski jackets, windcheaters, wind-jackets and similar articles of man-made fibres, knitted or crocheted	1.8	30.0%	0.1%	15.5%
6206.4010	Women's or girls' blouses, shirts and shirt-blouses of man-made fibres, not embroidered, made of lace, nor containing lace	1.8	34.1%	0.2%	9.6%
6402.9100	Footwear, with outer soles and uppers of rubber or plastics, covering the ankle	1.7	42.6%	0.3%	18.4%
4202.9200	Travelling-bags, insulated food or beverage bags, toilet bags, rucksacks, shopping-bags, map-cases, tool bags, sports bags, jewellery boxes, cutlery cases, cases for binocular, camera, musical instrument, guns, holsters and similar containers with outer surface of plastic sheeting or of textile materials	1.7	62.3%	0.7%	41.2%
6104.4300	Women's or girls' dresses of synthetic fibres, knitted or crocheted	1.7	21.2%	0.2%	6.5%
6204.6290	Women's or girls' trousers, bib and brace overalls, breeches and shorts of cotton, weighing =< 750 g each	1.6	64.7%	0.2%	37.6%
6203.4200	Men's or boys' trousers, bib and brace overalls, breeches and shorts, of cotton	1.6	27.7%	0.3%	13.8%
9405.1100	Chandeliers and other electric ceiling or wall lighting fittings, solely for light-emitting diode [LED] light sources	1.5	36.2%	0.4%	31.4%
6110.2000	Jerseys, pullovers, cardigans, waistcoats and similar articles, of cotton, knitted or crocheted	1.5	32.2%	0.5%	16.2%
6114.3000	Special garments for professional, sporting or other purposes	1.5	39.0%	0.2%	15.7%
Total		**75.0**	**40.4%**	**11.6%**	**19.3%**

Data source: Authors, based on data from Federal Office for Customs and Border Security (FOCBS) - March 2023.

2.5 Swiss Exports to China: Sino-Swiss FTA Success Stories and Utilization Deficits

by Zhikun Cui, Pengfei Zheng and Enci Wang

(1) In contrast to Chapter 2.3, this chapter focuses on AURs at the commodity level (HS 8-digit) rather than chapter level (HS 2-digit). In doing so, it aims to identify specific issues related to the SSFTA in a more granular way. The total of Switzerland's top 20 export commodities in terms of value amounts to 16.4% of all Swiss exports to China among commodities that utilize the most favored nation (MFN) rate of zero. The top 20 export commodities mainly come from five sectors: instruments (HS 90), pharmaceuticals (HS 30), machinery (84), jewelry (71) and electrical machinery (85). Among these, the instrument sector has ten of Switzerland's top 20 export commodities, with a total trade volume of more than USD 1 billion. **Table 2.14** shows that more than a quarter (25.1%) of Swiss exports to China are directly tariff-free and do not require the use of SSFTA provisions. This is very beneficial to the export sectors of instruments, pharmaceuticals, machinery and jewelry. It is crucial to emphasize that this zero-tariff policy applies to all WTO member countries, including Switzerland, and also indicates that significant steps have been taken by China to continually reduce tariffs and eliminate non-tariff barriers.

Table 2.14: Switzerland's top 20 commodities exported into China, 2022 (MFN Rate=0)

HS Code	Nomenclature	Trade Value (in million USD)	Trade Value (%)
30049090	Medicaments of products for therapeutic, prophylactic or diagnostic uses, consisting of mixed or unmixed products for therapeutic or prophylactic uses, put up in measured does or in forms of packing for retail sale	773.3	5.0%
90278990	Torque rheometer, other physical & chemical analysis instruments & devices	268.6	1.7%
84798999	Machinery & mechanical appliances having individual functions	214.4	1.4%
71101100	Platinum unwrought or in powder form	156.4	1.0%
90219090	Cochlear implant devices, other devices to compensate for physical defects, disability devices, etc.	143.3	0.9%
90279000	Microtomes; parts & accessories of instruments/appliances of 90.27	109.1	0.7%
90215000	Pacemakers for stimulating heart muscles, excl. parts & accessories	97.2	0.6%
84862022	Physical vapour deposition equipment for the manufacture of semiconductor devices or of electronic	88.6	0.6%
30043900	Integrated circuits	87.8	0.6%
90269000	Medicaments containing other hormones, consisting of mixed or unmixed products for therapeutic or prophylactic uses, put up in measured does or in forms of packing for retail sale	79.6	0.5%
90275090	Parts and accessories of instruments/appliances of 90.26	78.4	0.5%
90314990	Flow cytometry, other instruments & devices that use optical rays	70.6	0.5%
85423990	Other optical measuring or checking instruments & appliances	61.3	0.4%
90268010	Other integrated circuits	54.9	0.4%
85369011	Instruments & devices for measuring gas flow	51.7	0.3%
90262090	Connectors with a working voltage not exceeding 36 volts	51.6	0.3%
90319000	Other instruments/apparatus for measuring or checking pressure	46.8	0.3%
85044099	Parts & accessories of instruments/machines of 90.31	43.4	0.3%
84198990	Other static converters	40.3	0.3%
85414100	Other machinery, equipment for treating materials by change of temperature	40.3	0.3%
Top 20		2,557.6	16.4%
Rest		1,358.9	8.7%
Total (MFN rate =0)		**3,916.3**	**25.1%**

Data source: General Administration of Customs of China.

(2) In order to further improve the AURs of Swiss exporters to China, we undertook a search to identify commodities that could improve their utilization rates. **Table 2.15** lists commodities that account for a large proportion of trade value but have extremely low AURs, as these have considerable scope for improvement. This analysis focuses on the AURs at the commodity level (HS 8-digit) rather than chapter level (HS 2-digit) in order to identify key commodities with the potential to improve their AURs in certain sectors. We first selected the top 100 commodities in terms of trade value, and then focused on the 20 commodities among them with the lowest AURs. These commodities are mostly found in sectors such as instruments (HS 90), plastics (HS 39), machinery (HS 84) and electrical machinery (HS 85) and are predominantly industrial manufactured products, not primary products. These noteworthy products include artificial joints (HS 9021.3100), plastics bags (HS 3923.2900), and epoxide resins (HS 39073.000), and account for a relatively low share of trade value.

One of the reasons for their low AURs may be attributed to the rules of origin provisions, as companies can only benefit from preferential tariffs when they meet the prerequisite that "the majority of their exported goods to China are manufactured in Switzerland". While utilizing a free trade agreement can indeed reduce tariffs to some extent, it may also entail additional operational costs. Exporting companies must carefully weigh the relationship between the costs and benefits.

In conclusion, our detailed analysis at the commodity level (HS 8-digit) proves that most of the goods exported from Switzerland to China benefit from tariff reductions through the SSFTA. Overall, the utilization rate of the SSFTA is increasing year by year and has grown from 44% in the 2017 report (p. 41) to 71% in 2022 (**Table 2.15**). Due to the continuous deepening of China's openness to the outside world in recent years, the categories of goods with zero tariffs that are available to all WTO members exporting to China are also increasing (MFN rate=0). Therefore, some Swiss goods may not need to rely on the SSFTA for tariff reductions as they can directly benefit from tariff exemptions.

China is continuously making further efforts to enhance the greater utilization of the SSFTA in several areas. Firstly, China is consistently fulfilling tariff concession commitments, helping more items to benefit from zero tariffs or reduced tariff rates. Secondly, China is actively advancing measures to facilitate the better implementation of rules of origin provisions, enhancing businesses' willingness to apply for the preferential SSFTA tariff rates. For example, the electronic exchange of origin information now possible in origin declarations under the SSFTA has eliminated doubts regarding their authenticity by the customs authorities of the respective importing countries. Thirdly, China is advancing various measures to streamline customs procedures, expedite the clearance of goods, and reduce the time and cost of trade transactions. For example, the limit on the number of commodity items covered by the China-Switzerland Certificate of Origin has been raised from 20 to 50, providing greater convenience for both importing and exporting enterprises. These efforts aim to promote international trade, thereby creating more business opportunities for trading enterprises from both countries.

[1] The calculation methodology used for these two reports is not exactly the same, as is discussed on chapter 2.1 of this report.

Note: The views expressed in this contribution are the authors' own positions.

Table 2.15: Switzerland's top 20 export commodities to China with high trade value but low AURs, 2022 (MFN Rate≠0)

HS Code	Nomenclature	Trade Value (in million USD)	Trade Value (%)	AUR
90213100	Artificial joints	25.7	0.2%	0%
39232900	Sacks & bags (incl. cones) of other plastics	22.2	0.1%	0%
90139010	Parts & accessories of appliances of 9013.1000 or 9013.2000	12.8	0.1%	0%
39073000	Epoxide resins, in primary forms	21.9	0.1%	0%
90189099	Other medical, surgical or veterinary instruments & apparatus	53.7	0.3%	3%
90229090	Parts & accessories of apparatus of 90.22	16.3	0.1%	4%
87089999	Other parts & accessories of other vehicles of 87.02 to 87.04"	18.9	0.1%	6%
85371090	Boards/panels/bases for electricity control/distribution, ≤1,000 V	16.8	0.1%	6%
39269010	Machine or instruments parts of plastics	12.9	0.1%	9%
84818021	Electromagnetic directional valves	13.8	0.1%	10%
85389000	Parts for switches, fuses, panels, etc.	71.2	0.5%	12%
84099910	Parts for marine propulsion engines, diesel/semidiesel	11.4	0.1%	14%
85158090	Welding machines and equipment	36.9	0.2%	15%
90183900	Needles, catheters, cannulae & the like	29.2	0.2%	17%
84149090	Parts of machines, of other subheadings of 84.14	46.3	0.3%	20%
84483920	Electronic yarn clearer	25.7	0.2%	20%
69091200	Ceramic articles of hardness to 9 or more on Mohs scale	49.3	0.3%	23%
29362800	Vitamin E & its derivatives, unmixed	14.0	0.1%	25%
85441100	Copper winding wire	14.6	0.1%	27%
85013100	Generator with an output power not exceeding 750 watts	62.2	0.4%	27%
	Rest	15,028	96.3%	75%
	Total	**15,604**	**100%**	**71%**

Data source: General Administration of Customs of China.

2.6 Why the Sino-Swiss FTA is (not) Used by Chinese Exporters to Switzerland

by Yingxin Du, Siqi Li and Xinquan Tu

The utilization of preferential tariffs under the Sino-Swiss FTA (SSFTA) is influenced by a variety of factors. If calculated at the product level, the utilization rate could mask the heterogeneity across individual companies. To understand what determines the successful utilization of the SSFTA, it is important to look at the micro-level. By interviewing selected Chinese foreign trade companies, and consulting numerous existing studies, especially those using surveys of Chinese export companies, we provide a list of hypotheses on the determinants of the use of preferential tariffs by Chinese exporters (**Table 2.16**). These will help answer the question of why the SSFTA is (not) being widely used by Chinese exporters to Switzerland. We then review the degree to which evidence from business practice and the research findings support each of these hypotheses.

(1) The tariff-saving benefits of SSFTA utilization

The costs and benefits of utilizing the SSFTA are the key factors that affect its use by Chinese firms. Enjoying tariff reductions under the SSFTA can save Chinese companies duties that they would otherwise need to pay, thereby effecting an immediate reduction on costs that could provide companies a price advantage when exporting to Switzerland. Why then is this not happening to the expected degree?

A key reason is that SME exporters have lower incentives to utilize the SSFTA. The difference between the Most Favored Nation (MFN) rate and the preferential tariff rate is considered by many studies to be a key motivation for the use of the SSFTA. Products with a higher rate difference tend to have a higher utilization rate, as the marginal cost of exporting these products is lower. However, other studies did not find this to be a significant contributor to SSFTA utilization by Chinese exporters. SSFTA utilization is associated with both fixed and variable costs. The size of the benefit of SSFTA utilization also depends on the amount of exports that a company makes. Even if the tariff gap for a specific product is high, SMEs with small export values might still not choose to use the SSFTA, as the overall amount of tariff duties saved would not be large enough to cover the costs of the SSFTA utilization (Han et al, 2018).

(2) Awareness and understanding of the SSFTA

Before utilizing the SSFTA, businesses need to be aware of its existence. In almost all the surveys we found, a lack of information about the SSFTA is reported by the bulk of Chinese companies as the main obstacle stopping them utilizing it for their exports (Zhang 2010; Zhang et al, 2010; Shen & Wang, 2011). Lack of awareness about the benefits of the preferential tariffs and a lack of understanding on whether and how these could be used can result in underutilization. Acquiring information, learning and understanding about the provisions (especially the complex rules of origin) and practices are an important part of clarifying the fixed costs for companies in using the SSFTA.

Manufacturing firms vs. foreign trade companies

Many Chinese manufacturing exporters don't have their own trading department and rely on the services of specialized third-party foreign trade companies. This is consistent with the findings of some studies that manufacturing firms' utilization rate are lower than those of foreign trade companies i.e., trade intermediaries (Yue & Han, 2020). Compared with manufacturing enterprises, foreign trade companies have comparative advantages and specialize in obtaining information about the market and handling the import and export processes. They have *a priori* more incentives to understand FTAs and are better at utilizing the trade policies. However, it is worth noting that there are also studies that do not find significant differences between the FTA utilization rates of these two types of firms. There are two possible reasons for this, as has been posited by Feng et al (2018). The first is that the benefit of a tariff reduction under the SSFTA might mostly be obtained by the importer (in this case, the Swiss importer). If the Swiss importer does not insist on the certificate of origin, the foreign trade company will lack the incentive to spend time and effort in obtaining the certificate. The second possible reason is that foreign trade companies might simply not be able to provide the list of raw materials, components, and other inputs used in the production of the products they purchased from the Chinese firms, and are thus unable to cooperate with government regulatory authorities in verifying the origin of the products. This could make them less willing to apply the certificate of origin for Chinese enterprises.

Large firms vs. small firms

Empirical results also suggest that large companies are more likely to use the SSFTA than smaller ones. Compared to small companies, large firms are more able to overcome the fixed costs of utilizing the SSFTA and are likely to have better access to information. Smaller firms usually lack the human

Six main factors (twelve reasons) are hypothesized for SSFTA non-utilization by Chinese exporters to Switzerland

Table 2.16: Factors that determine SSFTA utilization by Chinese exporters to Switzerland

Determinants	Reasons for non-utilization
(1) The tariff-saving benefits of SSFTA utilization	The overall amount of tariff duties saved is not large enough to cover the costs of SSFTA utilization
(2) Awareness and understanding of the SSFTA	Lack of awareness of the SSFTA and its benefits There are fixed costs of SSFTA utilization associated with acquiring information and learning and understanding about its provisions and practices. These costs tend to be higher for manufacturing firms that focus more on production than for foreign trade companies. Usually, small firms or firms that only engage in sporadic exporting activities lack the resources or incentive to overcome these fixed costs
(3) The complexity of the rules of origin (ROO) provisions and the cost of origin management	The complexity of the ROO provisions The restrictiveness of the ROO provisions (e.g., clothing and footwear products have more restrictive ROO provisions than machinery) Cost associated with supply chain and origin management to meet ROO requirement, especially for firms engaging in international value chains
(4) Direct transport requirements	To minimize shipping and distribution costs, Chinese products exported to Switzerland might first be shipped to warehouses located in the EU, presenting challenges for compliance with the direct transport rule under the SSFTA
(5) Cost of applying and obtaining the documentary evidence of origin	The time and fees required to obtain a Certificate of Origin (CO) are the variable costs of SSFTA utilization Obtaining, retaining and preparing the documents needed to apply for COs could be complicated and time-consuming
(6) Risk of non-compliance and the costs of an investigation	Investigations into the veracity of COs can have negative impacts on businesses' export activities and increase firms' expectations on trade costs Risks of non-compliance with CO requirements and the potential consequences Lack of direct communication with the Swiss customs authorities to identify specific problems

Data source: Compiled by authors.

resources necessary to understand SSFTA provisions, especially the complicated rules of origin, or have no practical experience with SSFTA utilization. In addition, smaller firms—especially manufacturers—might not pay attention to or receive notifications about SSFTA-related trainings provided by the government or not have the motivation to participate in them (Sun, 2011). There are also other fixed costs associated with SSFTA utilization, referred to in the rest of this chapter, which also contribute to differences in how large and small Chinese enterprises utilize the SSFTA rates.

Short-term orders vs. long-term continuous export models

From a dynamic point of view, it could be worthwhile overcoming the fixed costs of learning about and understanding SSFTA utilization even if the tariff savings are not yet of high significance. Acquiring information, attending trainings, developing capable managers or employees trained on the intricacies of the SSFTA would help firms save on tariffs, improve the utilization of trade policies and better manage risks in future export transactions.

Evidence supports this learning or dynamic effect. The effect of the rules of origin provisions on FTA utilization decreases over time, as companies' costs of compliance decrease (Lu et al, 2023). Feng et al. (2018) find that the duration of an export activity has a positive and significant effect on FTA utilization. Firms that engage in export activities for continuous and long periods of time tend to have better knowledge and know-how about FTAs and other trade policies, decreasing FTA utilization costs and resulting in higher utilization rates.

(3) The complexity of the rules of origin (ROO) provisions and the cost of origin management

To be eligible for the preferential tariffs under the SSFTA, the product exported to Switzerland must meet the requirements of the rules of origin (ROO) provisions stipulated in the SSFTA. Besides a lack of information, the complexity of the ROO provisions is therefore another major factor that hinders SSFTA utilization. In order to work seamlessly it requires professionals or dedicated employees to understand the provisions and examine how the criteria are fulfilled for each specific shipment or product. As mentioned above, the human resources investment needed to fully understand the provisions could entail considerable additional fixed costs for companies in order to utilize the SSFTA. Moreover, as a requirement on the percentage of the value of non-originating material (VNM) is generally used, companies need to set up auditable origin management systems to keep records and documentation for the inputs used in their products (Research Team of Hangzhou Customs et al, 2019). This will increase the internal management costs of the exporting company and be especially difficult for SMEs.

Studies have shown that the restrictiveness of ROO provisions have resulted in a significant inhibitory effect on the utilization rate of the SSFTA. By comparing the size of the SSFTA utilization costs in different industries, it has been found that the more the inhibitory effect of ROO, the higher the SSFTA utilization cost (Han et al, 2018).

Domestic supply chain vs. international value chain

For China and other Asian countries, many businesses connect with the global market through their embeddedness into global value chains. This means that many high value-added segments are situated outside the country, resulting in very limited value added accruing to the non-originating materials for Chinese companies. In such cases, it is difficult for Chinese companies to meet the ROO requirements. If a product relies on inputs from multiple countries, ensuring that it meets the ROO criteria can be extremely challenging. Businesses might need to evaluate their production processes to utilize the preferential tariffs of various FTAs effectively. They would need to accurately calculate regional value content and raw material inputs according to the requirements of different FTAs. They would also need to retain relevant commercial documents such as invoices, bills of lading, and packing lists within the specified time frame (Zhao & Li, 2022). Empirical findings are in line with these observations, and show that products whose value and supply chains involve multiple countries and have complex requirement of substantial transformation tend to have a lower utilization rate (Li & Duan, 2015).

Clothing and footwear vs. machine equipment

Textiles or footwear exported from China to Switzerland have much lower utilization rates when compared with machinery products. This is largely because textile or footwear products have more restrictive ROO provisions and their value chains tend to be long and fragmented. For example, for articles of apparel and clothing accessories (HS 61, 62) the ROO requires that all nonoriginating materials used in the production process have undergone a change in tariff classification at the two-digit level (i.e., a change in the HS chapter) or the VNM does not exceed 60 percent of the ex-works price of the product. As for the ROO of footwear products and the materials used to produce them (HS 64), the product is required to have undergone a change in tariff classification at the four-digit level (i.e., a change in heading) of the HS, or its VNM does not exceed 60 percent of the exworks price of the product. In contrast, the ROO of machinery products (HS 84, 85) only requires a maximum VNM of 50%. Another factor at work is the realignment of the production chain in the Chinese textile and footwear industry. With rising labor costs in China, many companies along the value chain of these industries have chosen to move their factories to Southeast Asian countries to minimize production costs. However, this strategic change has made the fulfillment of the ROO provisions more difficult,

harking back to our previous point about the comparative challenges for the domestic and international supply chains.

(4) Direct transport requirement

In order to obtain preferential tariff treatment, companies must not only meet the ROO provisions but also fulfill another requirement—the rule of direct transport. Article 3.13 of the SSFTA specifies that originating products must be transported directly between the parties to receive preferential tariffs. There are some exceptions that allow products transported through non-party territories to still qualify under the direct transport requirement if they undergo minimal operations and remain under customs control in those territories.[1] The customs authorities of the importing party may request evidence to verify compliance with these conditions for the products in question.

In practice, to minimize shipping and distribution costs, Chinese products exported to Switzerland might first be shipped to warehouses located in the EU and then split up into separate shipments rather than being directly dispatched to Switzerland. This presents challenges for compliance with the direct transport rule under the SSFTA. The warehouses where the goods are stored must be in regions or countries with which Switzerland has a mutual administrative assistance agreement. Another key requirement is comprehensive accounting by the exporting company. The company must comply with regulations for open customs warehouses in Switzerland regarding inventory recording and the handling of goods (Economiesuissse, 2023).

(5) Cost of applying and obtaining the documentary evidence of origin

The time and fees required to obtain a Certificate of Origin (CO) are the variable costs of SSFTA utilization. According the survey results in existing studies, many Chinese companies have cited this cost as a reason for their non-utilization of the SSFTA. Yue & Han (2020) ask firms to rate the time they spend on CO applications on a scale of 1 to 5 where 5 is the shortest time. They find that this score has a significant effect on firms' utilization rate of the SSFTA. Regression results suggest that if the time spent on CO applications decreases, the utilization rate of the SSFTA by Chinese firms will increase.

Companies are concerned about obtaining and preparing the documents needed to apply for COs, which could be complicated and time-consuming. After their submission, the certificates are actually provided quite quickly (usually two working days) if not subject to ROO verification. Companies can also apply for and obtain the CO whilst the products are being shipped.

Certificate of Origin vs. Origin Declaration by Approved Exporter

The Origin Declaration by Approved Exporter system can be used as an alternative to the CO as documentary evidence of origin. Article 3.16 of the SSFTA specifies that a party may implement an Approved Exporter system under this agreement, allowing the Approved Exporter to complete an Origin Declaration. Self-declaration can greatly save time and costs for the exporter in utilizing the SSFTA. The majority of Swiss exporters use the Origin Declaration by Approved Exporter system. In contrast, the system in China is not yet as mature as that in Switzerland (Zhao & Li, 2022). Currently, it is implemented based on the mutual recognition of the Authorized Economic Operators (AEOs) scheme between China and Switzerland that came into force in 2017. AEOs can submit a written commitment to Chinese customs to apply for the status of Approved Exporter under the SSFTA. Enterprises that qualify as Approved Exporters can then issue Origin Declarations for the originating products they produce and export to Switzerland in accordance with the SSFTA, without applying for a CO.

(6) Risk of non-compliance and the costs of an investigation

Investigations on the veracity of COs can have negative impacts on businesses' export activities and increase firms' expectations on trade costs. Exporters might be concerned about the risks of non-compliance with origin requirements and the potential consequences, including the denial of preferential tariff treatment or delays in customs clearance. A lack of direct communication with the Swiss customs authorities to identify specific problems may further increase the time needed to address customs concerns.

[1] Pipeline transport across non-party territories is another exception.

Conclusion

To sum up, while utilizing the SSFTA has the potential to provide tariff savings and price advantages for Chinese exporters, there are also costs and risks involved. However, the costs and benefits can vary widely depending on the specific industry, product, and priorities of Chinese exporters. Many of the challenges in utilizing the SSFTA are also faced by Swiss exporters, while some have a greater effect on Chinese companies. To address these challenges and promote a wider utilization of the SSFTA, Chinese authorities, trade organizations, and businesses need to collaborate to raise awareness, provide trainings, simplify administrative processes, increase the efficiency of audit and inspections, facilitate communication when investigations are launched, and ensure that exporters, especially SMEs, have the necessary resources to navigate the sometimes complex SSFTA requirements effectively.

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2.7 Why the Sino-Swiss FTA is (not) Used by Swiss Exporters to China

by Patrick Ziltener, Nicolas Musy, Zhen Xiao, Lucky Ding and Valentin Bangerter

The utilization of free trade agreements (FTAs) is a critical factor in shaping international trade strategies for businesses worldwide. The Sino-Swiss Free Trade Agreement (SSFTA) offers Swiss exporters various benefits when conducting business with China and has become a critical factor in shaping China-specific strategies for Swiss firms. However, the degree to which Swiss firms utilize the SSFTA in exporting to China varies, influenced by a range of factors. This chapter explores these factors and their implications for Swiss exporters, shedding light on why some choose to utilize the SSFTA while others opt not to.

In general, Swiss companies see FTAs as useful and very important for their export activities. Outside of Europe, the SSFTA is the most utilized FTA by Swiss exporters (SECO 2022, p. 9). However, this report finds that some sectors or companies don't utilize the SSFTA. Some of the key reasons for this are summarized in **Table 2.15**, based on studies of Switzerland's 20 leading export commodities to China with high trade values but low Adjusted Utilization Rates (AURs).

Table 2.17: Factors that determine the non-utilization of the SSFTA by Swiss exporters to China

Determinants	Reason for Non-Utilization
(1) The tariff-saving benefits of SSFTA utilization	Many SMEs in Switzerland often have low trade volumes or markets that are too small. The potential savings are not high enough to cover the compliance costs (paperwork, documentation, etc.), especially when additional documentation beyond the standard is required. However, some Swiss companies, even those with low trade volumes, do sometimes serve premium markets that are less price sensitive.
(2) Obtaining the Certificate of Origin (CO)	A wide range of products are either sourced from or have production sites in other countries. This means that the processing of products, repacking, etc., can complicate the requirements to obtain a CO to validate the 'Swiss Origin' criteria.
(3) Low or zero-applied tariffs render utilizing the SSFTA obsolete	China's Tariff Adjustment Plan offers rates as low or even lower than those provided under the SSFTA, as is the case for pharmaceuticals.
(4) Investments are required for efficient SSFTA utilization	The set-up and maintenance costs for the IT infrastructure needed for SSFTA support are substantial. In addition, there are also costs associated with the need to educate colleagues, suppliers and stakeholders on SSFTA usage.
(5) Some commodities are not covered by the SSFTA	Certain goods are not covered by the SSFTA, therefore no tariff reduction can be obtained (this applies to very few types of commodities that Swiss companies export to China, e.g., in the dairy sector).
(6) A lack of willingness to publish information	The level of transparency required to utilize the SSFTA can be a problem for the protection of confidential business information, e.g., information about the chemical components of a product, or the production methods used.
(7) Problems with the processing time needed to utilize the SSFTA	Processing the application for duty-free exports under the SSFTA may lead to delays that could be critical for certain commodities.

Source: Compilation by authors.

(1) The Tariff-Saving Benefits of SSFTA Utilization

One of the fundamental determinants driving Swiss exporters to consider utilizing the SSFTA is the potential for significant tariff savings. The SSFTA often grants preferential tariff rates, reducing the cost of exports and bolstering the competitiveness of Swiss products in the Chinese market. This cost advantage can be particularly appealing to exporting businesses but the costs of utilization can also create barriers. For example, many SMEs in Switzerland often have small trade volumes or markets that are too niche to justify the costs of utilization. Other Swiss exporters may target premium market segments within China where consumers prioritize product quality over price. In such markets, the reduced tariffs provided by the SSFTA may have a limited impact on pricing, thereby reducing the incentive for Swiss companies to utilize the agreement.

Swiss chocolate on sale in Beijing, September 2023

Picture source: Courtesy of Zhang Yue, Beijing, September 2023.

Swiss Chocolate Exports to China: A SSFTA Success Story – With Caveats

Twenty years ago (2002), Switzerland exported 2 tons of chocolate with a value of CHF 57,000 to China. Ten years later, these exports had increased to 1008 tons (with a value of CHF 6 million). After the introduction of the SSFTA in 2014, a step-by-step reduction in tariffs began: from 10% to 8% in the first year, and so on until 2018, when almost all categories of chocolate reached zero duty. By 2018, Swiss chocolate exports surpassed the 2000-ton mark for the first time (2,255 tons with a value of CHF 12.6 million).

Since the introduction of the SSFTA, Swiss chocolate exports have doubled (in quantity) and tripled (in value). In 2022 they reached 3,631 tons with a value of CHF 31.6 million. It is estimated that more than two-thirds (68.8%) of these exports are duty free. Swiss chocolate producers do not report major obstacles in utilizing the SSFTA. Thanks to this successful utilization rate, one can infer that the payment of USD 2.6 million in Chinese tariffs was avoided in 2022 alone. As a result, chocolate is now ranked 14th among the 25 most successful product groups when it comes to SSFTA savings, after 13 other categories of watches, machinery, and instruments.

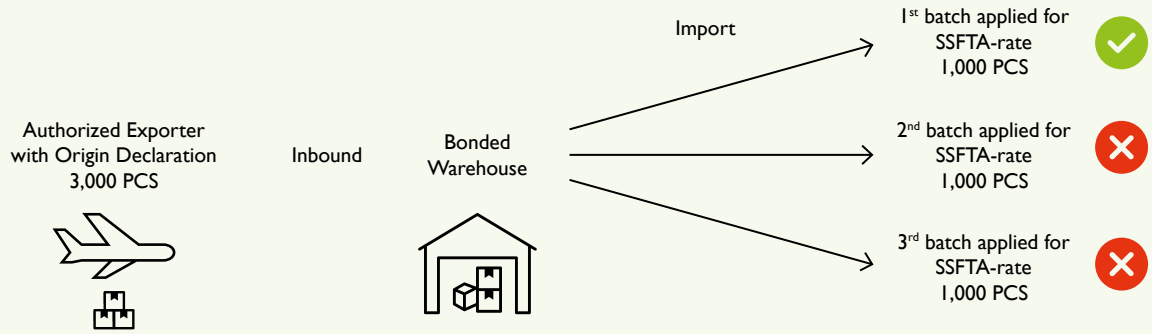
However, some categories of Swiss chocolate exports are still subject to significant duties—an estimated USD 1.2 million in total.

According to Swiss chocolate exporters, this has to do with the paperwork requirements. Sometimes, when additional forms are requested, and the expected time loss caused by procedures to obtain and verify documents can be costly, resulting in the fact that companies sometimes simply prefer to pay the duties. In some cases, the chocolate does not meet the requirements of 'Swiss Origin'. This may be the case for some so-called 'chocolat noir' (dark chocolate with little or no sugar or milk added). (Information from Swiss Chocolate Exporters, September 2023).

Another issue is exemplified by a Swiss company that has exported Swiss-made chocolates to China for more than 10 years and is familiar with the SSFTA rules and processes. The company enjoys Swiss Customs' Approved Exporter status and benefits from zero tariffs by providing a self-declaration document "Origin Declaration". Yet it still faced difficulties when shipping a large-quantity consignment in one bundle to a bonded warehouse in Shanghai, and had to import the chocolate in three separate batches. In the Chinese Customs system, the Origin Declaration can only be used once and becomes invalid after the 1st-batch is imported successfully at the SSFTA rate. The 2nd and 3rd import batches were therefore subjected to the normal duty rate of 8%.

However, if the Swiss exporter had used the EUR1 as a Certificate of Origin, this would have allowed the above-mentioned "inbound once and imported in batches" model without problems. We therefore suggested to the company that they should use a EUR1 certificate instead, but as a Swiss Customs' Approved Exporter they are only required to provide the Origin Declaration.

This issue represents a technical obstacle in the system and should be addressed and solved through discussions between the Chinese and Swiss Customs.



Source: Swiss Centers, September 2023.

(2) Obtaining the Certificate of Origin (CO)

Obtaining the CO is a crucial factor in how the SSFTA is utilized. This certificate confirms the 'Swiss Origin' of products, a prerequisite for both SSFTA utilization and satisfying customer demands. However, it also presents reasons for non-utilization.

Swiss exporters are often part of complex supply chains, sourcing products from various locations, manufacturing in multiple countries, participating in processing trade, and repacking goods. These factors can significantly complicate the process of meeting the stringent 'Swiss Origin' criteria. Research finds that this is one of the most severe challenges for Swiss companies when using any type of FTA (SECO, 2022, p. 11).

Effective cooperation with public institutions and regulatory bodies is essential in facilitating trade for Swiss companies. Industry associations, circles of experts, business hubs, and governmental institutions play a pivotal role in supporting Swiss exporters' Chinese business. However, these processes are often not seamless and can contribute to the non-utilization of the SSFTA. For example, Swiss exporters had difficulties to obtain retroactively a CO from the Swiss customs, or to make changes or amendment on a CO after the shipment.

Relatedly, in some cases the failure to understand Chinese customs procedures may explain non-utilization of the FTA. A prior survey identified a lack of institutional awareness of the SSFTA as a reason for it not being used more widely (swisscham.org, 2018, p. 4). Moreover, Swiss companies that lack a local presence in China may find it challenging to develop an understanding of Chinese customs procedures. This can hinder access to crucial information and support. However, existing AUR rates detailed in **Table 2.6** show that over the last five years utilization rates have increases significantly and are at high levels.

Recommendations for exporters

Reinforce the expertise available to Swiss and Chinese companies to better utilize the SSFTA

Experience has shown that taking full advantage of the SSFTA requires considerable expertise in order to work constructively with the customs and potentially other regulatory authorities of the destination country. Companies exporting significant trade volumes to China would benefit both from building up the internal expertise of their logistics team and through using external partners that have the know-how, access to the relevant customs administrations or previous experience with similar cases.

Companies that do not have their own subsidiaries in the country of destination might choose to rely on their partners or customers there to handle customs clearances. These partners may often lack know-how and experience on the SSFTA, since it is the only existing FTA between continental Europe and China.

Share the experience

While the above recommendation unavoidably entails costs, both internally and from the use of external expertise, it is useful for smaller players engaged in trade between China and Switzerland to obtain advice and expertise from others' experiences. Sino-Swiss economic relations actors have a particular role to play in this respect. The SSFTA Roundtable, organized by the Swiss Consulate General in Shanghai in partnership with Swiss Centers is one such initiative that could be further developed. Discussions of concrete cases allow such experience sharing and additionally facilitate the dialogue between the customs authorities of the two countries, thus helping to improve the overall efficiency of the SSFTA.

Plan and prepare well in advance of the shipment

Pre-investigations before making a shipment are always useful, especially when this concerns a new product or a different route or method of transportation. Such preparation work can help to avoid mistakes and problems that may be costly to rectify once the consignment is shipped. For example, Swiss exporters are able to verify the HS-code using a pre-classification service with Chinese customs.

Medical Products: Swiss-made Needles for China

A Swiss medical device company has long been exporting their Class III products to China. However, they have not been able to make use of the tariff exemptions under the SSFTA for some of their products because they undertake a re-packing operation outside of Switzerland, where their finished and already packed and sterilized products are put into retail boxes before being delivered for sale to their customers in China.

China Integrated were asked to study the possibility of making use of the SSFTA by re-packing the items in China since it is explicitly allowed under Article 3.1, section 1, sub-section (c) that "packing and re-packing" by the parties to the SSFTA does not prevent its utilization.

However, while the Swiss company could import its products in bulk using the tariff exemption, the Chinese National Medical Product Administration (NMPA) standard regulations would not allow a re-packing operation in China for a medical device unless the organization carrying out the re-packing obtained a production license for the product being re-packed.

Frustratingly, such a production license is only issued for a product that is 'Made in China'. This is a typical catch-22 situation that arises as a consequence of conflicting regulatory requirements that are specific to medical devices. In this case, the allowance made for "packing and re-packing" in the SSFTA could not be applied to to these medical devices. This unfavourable situation was confirmed in two different provinces in China.

Non-value-adding operations such as packaging that do not change the origin of a product and may often be sub-contracted to lower-cost countries by Swiss manufacturers, may well be an important reason for the non-utilization of the SSFTA. In addition, this issue may also be having an impact on other regulated industries (such as pharmaceuticals and cosmetics among others).

Further research on this topic could provide more insights and values to Swiss companies. In this case, China Integrated investigated further and eventually obtained from the Shanghai branch of the NMPA an oral confirmation that our client's medical devices could be re-packed in a bonded warehouse and then imported into mainland China using the duty exemptions of the SSFTA. The details on how to carry out the process were complex and complicated to put in place, but eventually a test shipment was sent with a small number of products that validated the operation, combining customs processes, the re-packing operation, and the Shanghai NMPA process.

This very specific case indicates that important savings may be within reach for many Chinese importers of Swiss medical products, and potentially for other products that are currently regulated and not utilizing the SSFTA.

Source: China Integrated, September 2023.

(3) Low Tariffs Render the Utilization of the SSFTA Unnecessary

An intriguing factor that affects the utilization of the SSFTA is the perception that it may be unnecessary due to the already low tariffs available to all (under the most favored nation provisions of the WTO). Some Swiss companies may believe that China's tariffs, even outside of the SSFTA, are sufficiently low to warrant trade without seeking additional benefits. This perception is particularly pronounced in industries like pharmaceuticals or other medical supplies, where China's tariff adjustment plan offers rates as low as, or even lower than, those provided under the SSFTA.

Pig feet on sale in China, September 2023

Swiss Pigs' Feet to China: A SSFTA Success Story

Tariffs are not the only obstacle to free trade in practice. There are many requirements that successful exports have to comply with, such as technical specifications, obtaining special licenses, or phytosanitary certificates for fruits. In the case of dairy products, China implemented new sanitary and quality standards in November 2021, which allowed European cheese producers to export a wider range of traditional cheese products to China.

Switzerland produces high-quality pork meat and offal. Many parts that are not consumed domestically are exported, including pig ears, feet, snouts, and tails, which are highly valued by consumers in China. The SSFTA covers and reduces tariffs on pork products among other meat exports. However, in practice, strict Chinese sanitary standards largely prohibited pork exports to China.

Swiss Nutrivalor AG, a subsidiary of the Centravo-Group which is part of the Centravo Holding AG based in Zurich, built a new factory in Oensingen, in the Canton of Solothurn, costing over CHF 20 million in order to comply with the high standards China sets for meat imports. A special 'China line' has been developed for that purpose, which is strictly separated from other meat processing lines. The operating expenses are quite high, but the advantages available under the SSFTA added a significant incentive to this investment. The practical requirements regarding washing and storage, for instance, are a daily challenge (Swiss Nutrivalor, 2023). Of course, the whole supply chain has to comply with the high standards. More than 4000 tons of pig's feet are now set to be exported from Oensingen to China annually. This has a special significance, since the Swiss pork producers aim to stick consistently to the 'from nose to tail' principle, which means making use of all parts of the animal (Schwyn & Nufer, 2019).

China has sent experts to inspect Swiss pig farms and abattoirs on several occasions and, in Summer 2019, gave their approval for Swiss pork and offal exports (Felber-Eisele, 2019). Five years after the introduction of the SSFTA, Swiss pork exporters could finally start to utilize the benefits of the agreement. On the basis of an AUR of more than 80%, we estimate that Swiss exporters will save approximately USD 1 million in annual duties.

Source: Authors' communication with Swiss Nutrivalor (2023, September 22) via phone and mail with Erich Rava, Head of Corporate Communications & Marketing at Swiss Nutrivalor AG.
Picture source: Courtesy of Zhang Yue, Beijing, September 2023.

(4) Investments Required for Efficient SSFTA Usage

A barrier to the wider utilization of the SSFTA by Swiss companies is the need for investments to enable its efficient implementation. Adapting business models and establishing an efficient IT infrastructure to support SSFTA registration procedures are costly. Some companies deliberately delay SSFTA utilization while preparing their businesses for more efficient usage of the agreement. First, establishing and maintaining the necessary IT infrastructure to support SSFTA usage can be resource-intensive and deters some companies. Second, educating suppliers and other stakeholders on the intricacies of the SSFTA is crucial but can be a time-consuming and challenging process.

Advanced Manufacturing: Swiss Cutting Tools

The company is a well-established manufacturer of machine tools and has a Chinese sales office at Swiss Center Shanghai in the Free Trade Zone. Their products are milling, drilling, and cutting tools, which enjoy a reduced tariff set at 0.4% under the SSFTA (as compared to the normal rate of 7.5%).

While the company has successfully benefited from the duty exemptions under the SSFTA on its direct exports from Switzerland to Shanghai by sea or air, it encountered problems when their shipments took another route.

The latest failure happened in March 2023 for an order by a Chinese customer based in Shenzhen. The logistics team arranged shipment from Switzerland to Hong Kong by air, and onward transportation by road to Shenzhen. When the customer importing the goods applied for the preferential SSFTA-rate, it was refused by Chinese customs as the shipper could not provide the 'non-manipulation certificate' which must be applied when at a transit place.

Indeed, according to China customs regulation No. 52, issued in 2016, for shipments within the scope of the SSFTA that transit from Hong Kong or Macao with a change in transportation type, a 'non-manipulation certificate' must be applied at the local customs point.

This is an example that demonstrates the need for well-planned logistics and full documentation to prove that the direct transportation of goods between the two countries is compliant with the provisions required by the SSFTA. This problem may also occur when a consignment goes via a European port and more than one transportation document is issued. These pitfalls can be avoided if Swiss exporters seek professional support and carefully prepare the route and the necessary processes.

Source: Swiss Centers, September 2023.

(5) Goods not Covered by the SSFTA

While the SSFTA offers significant advantages, it is essential to note that not all goods are covered by the agreement. This means that for specific types of goods that Swiss companies export to China, no tariff reductions can be obtained through the SSFTA. Fortunately, this scenario applies to only a limited range of products that Swiss companies deal with in their exports to China, such as certain commodities in the dairy sector. For these goods, the SSFTA may not provide any tariff advantage, reducing the incentive for its utilization.

(6) Willingness to Publish Information

The level of transparency required to utilize the SSFTA can sometimes be a challenge for Swiss exporters. While the SSFTA necessitates the disclosure of information, this requirement can conflict with the protection of confidential business information. Companies may hesitate to divulge details about the chemical components of their products or their unique production methods. Balancing the benefits of SSFTA utilization with the need to safeguard proprietary information may influence Swiss exporters' decisions on whether to utilize the potential benefits of the agreement.

(7) Importance of Processing Time

For some Swiss exporters, the importance of processing time in the context of SSFTA utilization cannot be understated. Processing applications for duty-free exports under the SSFTA may introduce delays that can be critical for certain types of goods. In some instances, timely delivery is essential to meet market demand or contractual commitments. These considerations may lead some businesses to opt for non-SSFTA routes to avoid potential delays.

Conclusion

The utilization of the SSFTA by Swiss exporters is influenced by a complex set of factors. While the advantages of reduced tariffs are apparent, the decision to utilize the SSFTA depends on factors such as the nature of the business, administrative complexities, the need for COs, collaboration with public institutions, and the investments required for the efficient usage of the trade agreement. In addition, the uptake by Swiss companies rests on whether their products are covered under the SSFTA, their willingness to disclose sensitive information, and how timely their deliveries need to be. Swiss exporters must carefully assess these factors in order to take a decision on whether to utilize and maximize the potential benefits of the SSFTA. In short, while SSFTA AURs are higher for Swiss imports into China than the reverse, there are significant additional opportunities for savings in both directions.

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PART III

Extended analysis of Sino-Swiss economic relations

第三部分

中瑞经济关系的延伸分析

3.1 New Developments in China's Openness: Unilateral Measures for Trade and Investment

by Xinquan Tu, Siqi Li and Yingxin Du

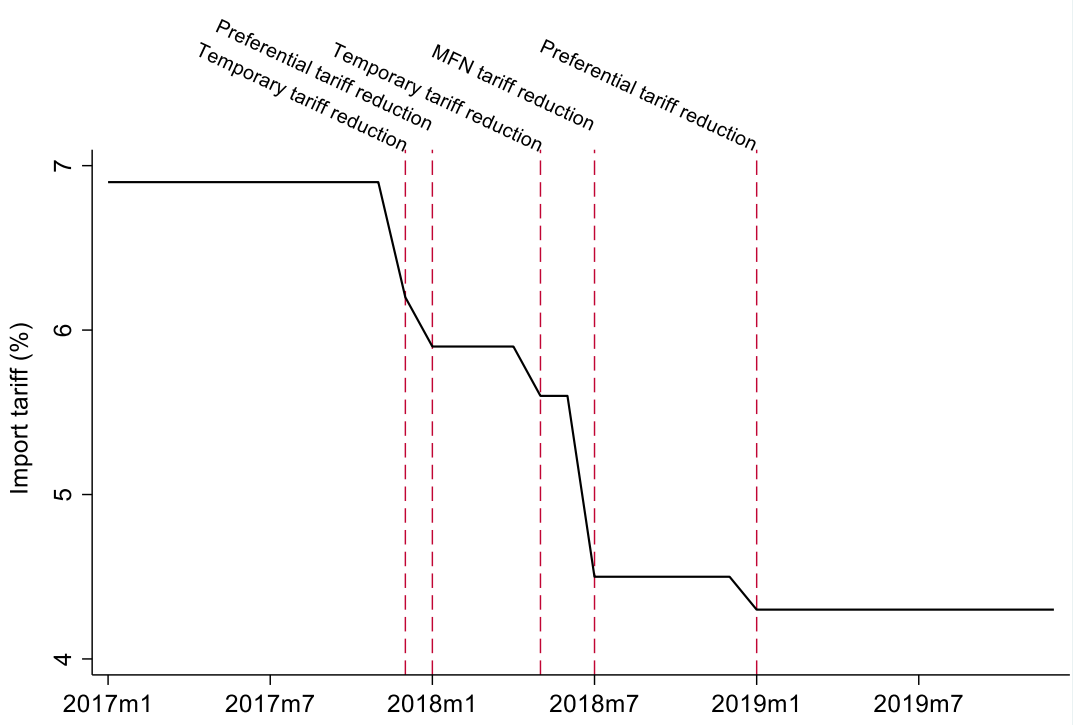
Following the trend of globalization and promoting opening up as a fundamental state policy, China has been seeking development through measures designed to foster greater trade and investment. The greater openness of China has benefited both itself and the wider world in terms of capital, technology, talent and so on. China's pace of opening up is unlikely to slow down in the future, and the country will continue to advocate for economic globalization to support global prosperity.

(1) Increasing trade openness with several rounds of tariff reductions

China has been undertaking tariff reductions that go beyond its WTO commitments. According to China's WTO Accession Protocol, the country was required to reduce the total overall import tariff rate to 9.9% by the end of 2007. To date, China has fully implemented these tariff commitments and further reduced the total overall import tariff rate to 7.5% in 2022 (WTO, ITC, and UNCTAD, 2023).

As indicated in **Figure 3.1**, since 2017, China has successively lowered tariffs on consumer goods by adjusting temporary tariff rates, preferential tariff rates and most-favored-nation (MFN) tariff rates. From 2017 to 2019, China's tariffs on consumer goods experienced five major adjustments. In December 2017, China implemented a temporary tariff reduction on 187 types of consumer goods, such as food and beverages, daily chemicals, clothing, and shoes and hats, reducing the weighted average tariff from 6.9% to 6.2%. In January 2018, China continued to reduce the preferential tariff on imported products originating in ASEAN economies, South Korea, Switzerland, and other FTA partners, cutting the weighted average tariff on consumer goods from 6.2% to 5.9%. In May 2018, China reduced the MFN tariff on imported medicines, taking the weighted average tariff on consumer goods down to 5.6%. In July 2018, China significantly lowered the MFN tariff on a total of 1,449 taxable types of consumer goods such as clothing, shoes and hats, household goods and appliances, and sporting goods, reducing the weighted average tariff on consumer goods yet again from 5.6% to 4.5%. A fifth round of cuts was implemented in January 2019, as China lowered the preferential tariff in nine FTAs, including the Sino-Swiss agreement, taking the weighted average tariff on consumer goods down to 4.3%.

Figure 3.1: China's weighted average tariffs on consumer goods from 2017-2019



Note: The consumer goods are classified according to the Business and Enterprise Codes (BEC) and China's official declaration on tariff reductions. The value of imports in 2017 is used as a weight to calculate the weighted average tariff in the country-product-time dimension. Imports of consumer goods from the United States are excluded to eliminate the impact of China-US trade frictions on the tariff calculations.
Source: Qin & Ma, 2023.

(2) Increasing investment openness with a negative list approach

China has been continuously easing market access for foreign direct investment (FDI). In 2013, China launched the first negative list for FDI in the Shanghai pilot free trade zone (PFTZ), which was extended to other PFTZs in 2015 and the whole country in 2018. **Figure 3.2** shows that from 2013 to 2021, the PFTZ negative list was shortened with the number of restrictions reduced from 190 to 27. This was also the case for the nationwide negative list. In 2021, the PFTZ negative list eliminated all manufacturing items, committing to all-around market access in the manufacturing sector.

With PFTZs playing a leading role in China's opening up and high-quality development, there are a number of experiences in these pilot zones that can be replicated across the country. As indicated in **Table 3.1**, if one compares the 2021 versions of the PFTZ and nationwide negative lists, it becomes clear that PFTZs have fewer restrictions on FDI in agriculture, manufacturing, business services, and the cultural and entertainment sectors.

Furthermore, the Hainan Free Trade Port demonstrates a new template for China's opening up. On the one hand, the Hainan negative list for FDI is shorter than both the PFTZ and nationwide versions, further liberalizing the mining, telecommunications, education, and legal service sectors. On the other hand, Hainan launched the first negative list for cross-border services trade in 2021, which has resulted in a major change in the management approach to cross-border services trade. Since China has not applied any negative list for the trade of services in international agreements, Hainan's trial to seek greater openness in the services sector is of significant experimental and demonstrative importance.

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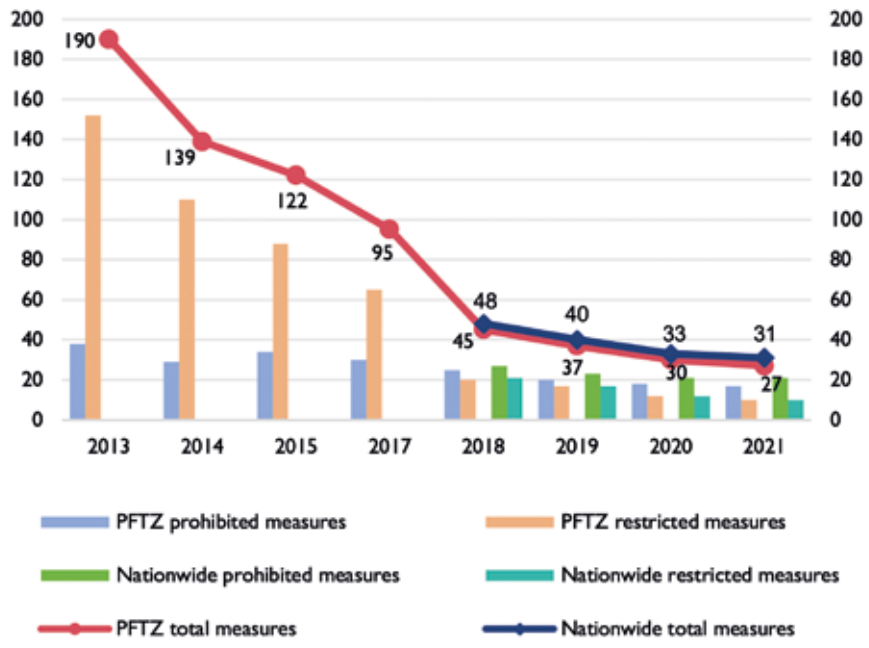
Figure 3.2: The number of restrictions on negative lists applicable to PFTZs and country as a whole



Data source: Policy documents: Negative list for foreign investment access (in Chinese) (https://www.gov.cn/fuwu/zhuanti/wstzfmqd/zcwj.htm)

Table 3.1: Comparison between the 2021 versions of the PFTZ and nationwide negative lists

Sub-sectors	2021 PFTZ negative list version	2021 nationwide negative list version
Investment in the fishing of aquatic products under Chinese jurisdiction	Prohibited	Restriction eliminated
Printing of publications	The controlling stake shall be held by the Chinese Party	Restriction eliminated
Investment in the processing techniques of Chinese herbal medicines and production of confidential prescription products of proprietary Chinese medicines	Prohibited	Restriction eliminated
Investment in market surveys	Market surveys shall be limited to joint ventures	Restriction relaxed
Investment in social surveys	Prohibited	The proportion of Chinese shares shall not be less than 67% and the legal representative shall have Chinese nationality
Performing art groups	Prohibited	The controlling stake shall be held by the Chinese Party

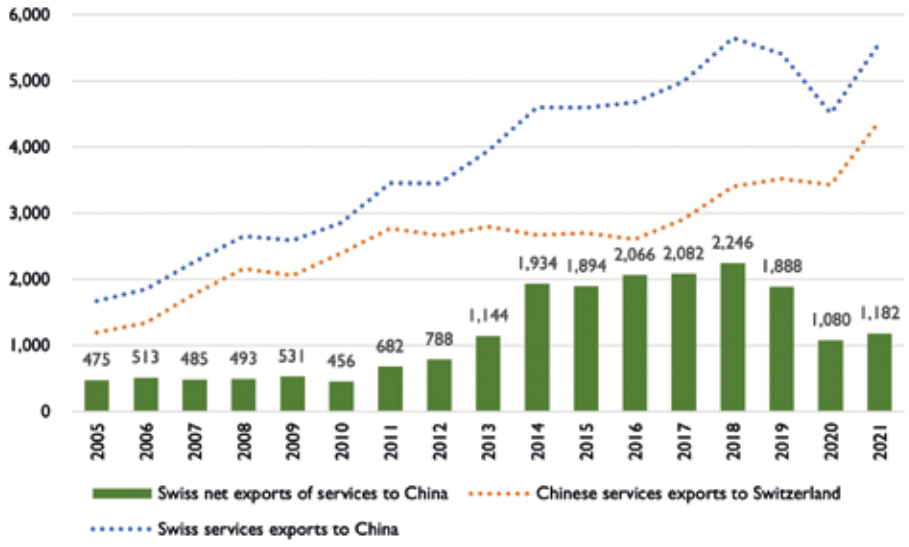
Data source: Policy documents: Negative list for foreign investment access (in Chinese) (https://www.gov.cn/fuwu/zhuanti/wstzfmqd/zcwj.htm)

3.2 The Development and Future Prospects for the Trade in Services between Switzerland and China: The Impact of the Sino-Swiss FTA

by Yingxin Du, Siqi Li and Xinquan Tu

As the economies of Switzerland and China are highly complementary, the economic relationship is now realizing its significant potential not only in the trade of goods, but also in the trade of services. According to the OECD-WTO Balanced Trade in Services Database, Switzerland registered a services trade surplus with China of USD 1.18 billion in 2021, with an average services trade surplus of USD 1.70 billion over the last five years (see **Figure 3.3**).

Figure 3.3: Trade in services between Switzerland and China (in million USD)



Data source: OECD-WTO Balanced Trade in Services Database.

Table 3.2 shows the relative importance of the trade in services between Switzerland and China. Switzerland exported USD 5.58 billion in services to China in 2021, accounting for 3.45% of Switzerland's total services exports and corresponding to 1.54% of China's total services imports. China ranks 4th among Switzerland's export destinations for services behind the EU, the US and the UK, and is the 11th largest supplier of services to China. China exports USD 4.40 billion in services to Switzerland, 1.48% of the country's total services exports and representing 1.93% of Switzerland's total imports of services. Switzerland is China's 12th largest export destination for services while China is the 7th largest supplier of services to Switzerland, behind the EU, the US, the UK, Singapore, Japan and India.

Table 3.2: Share and ranking of the trade in services between Switzerland and China

Swiss services	**With China** (in billion USD)	**With the world** (in billion USD)	**Share**	**Ranking**
Exports	5.6	161.9	3.45%	4
Imports	4.4	227.5	1.93%	7
Chinese services	**With Switzerland** (in billion USD)	**With the world** (in billion USD)	**Share**	**Ranking**
Exports	4.4	297.4	1.48%	12
Imports	5.6	361.3	1.54%	11

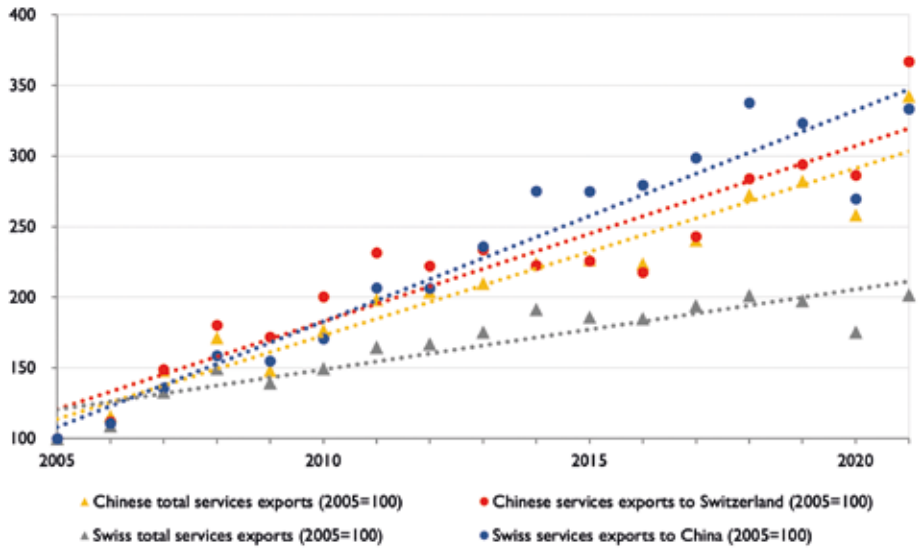
Data source: OECD-WTO Balanced Trade in Services Database.

(1) A growing upward trend in the trade of services between Switzerland and China

Over the past two decades, the trade in services between Switzerland and China has generally been growing rapidly, except during periods of global economic slowdowns and downturns. The average yearly growth rate of bilateral services trade flows between the two countries exceeded 8% between 2006-2021. The explanation for this growth is to be found in the theory of comparative advantage. As shown in **Figure 3.4**, the growth of their services exports to each other has outperformed the growth of their exports of services to the rest of the world. In particular, Switzerland, a country with strong international competitiveness and a comparative advantage in services, has been a net exporter of services to China.

Of note in the context of this report is that the growth of Switzerland's services exports to China has been much greater than the growth of its total services exports to the rest of the world, with particularly significant increases seen in 2014 and 2018. It is hypothesised that this could be due to the impact of the Sino-Swiss FTA (SSFTA) which came into force in 2014. The falls in the period from 2015 to 2017 can largely be attributed to the slowing down of the global economy and the resultant lower trade flows.

Figure 3.4: Trends in the trade in services between Switzerland and China



Source: OECD-WTO Balanced Trade in Services Database.

(2) The growth in specific service sectors and the impact of the SSFTA

The SSFTA further opened up the services market by including a positive list based on WTO commitments. Specifically, Switzerland set a time limit for the processing of visas, work permits and residence permits, launched a dialogue on cooperation in traditional Chinese medicine, and further opened up the sectors of tourism, translation services and other fields. China, for its part, has opened up 36 sub-sectors in 10 service sectors to Switzerland (Boao Forum for Asia, 2020). Beyond the major undertakings in China's WTO accession protocol, China has made new commitments in two sectors of services in the SSFTA (on research and development services and sporting and other recreational services). It has also enhanced its commitments in other sectors including computer and related services, real estate services, other business services, environmental services, banking and other financial services (excluding insurance), travel agencies and tour operators' services, and air transport services.

Though these improvements to the scope and depth of specific commitments on the trade in services in the SSFTA are regarded as modest when compared to the General Agreement on Trade in Services (GATS) commitments (Gari, 2020), there has been a significant growth in the trade in services between the two countries, both at the aggregate level and in most services sectors. As is shown in **Table 3.3**, in 2013, the year before SSFTA came into force in July 2014, China exported services worth USD 2.67 billion to Switzerland, while in 2021, this value had increased by 57%. In 2013, Switzerland exported USD 3.94 billion in services to China, a value that had increased by 41% in 2021. Most of these increases come from the category of 'other commercial services', which account for more than half of total services exports.

Table 3.3. Sino-Swiss trade in services (in million USD)

	Switzerland's services exports to China (USD mio.)		**China's services exports to Switzerland** (USD mio.)	
Sector/Year	**2013**	**2021**	**2013**	**2021**
Goods-related services	84	99	641	440
Manufacturing services on physical inputs owned by others	7	8	593	395
Maintenance and repair services n.i.e.	77	91	48	45
Transport	831	1,404	766	857
Travel	783	319	93	32
Other commercial services	2,216	3,714	1,295	3,062
Construction	18	21	19	42
Insurance and pension services	413	238	19	24
Financial services	39	62	13	33
Charges for the use of intellectual property	966	1,764	27	493
Telecommunications, computer, and information services	276	693	252	353
Other business services	491	901	937	2,029
Personal, cultural, and recreational services	12	35	29	88
Government goods and services	31	43	4	5
Total	**3,944**	**5,578**	**2,800**	**4,396**

Notes: Data comes from OECD-WTO Balanced Trade in Services Database. "Other business services" contains research and development services, professional and management consulting services, technical and trade-related services, and other business services not included elsewhere.

The next sub-sections review the various trends in the trade of services between the two countries that have been identified.

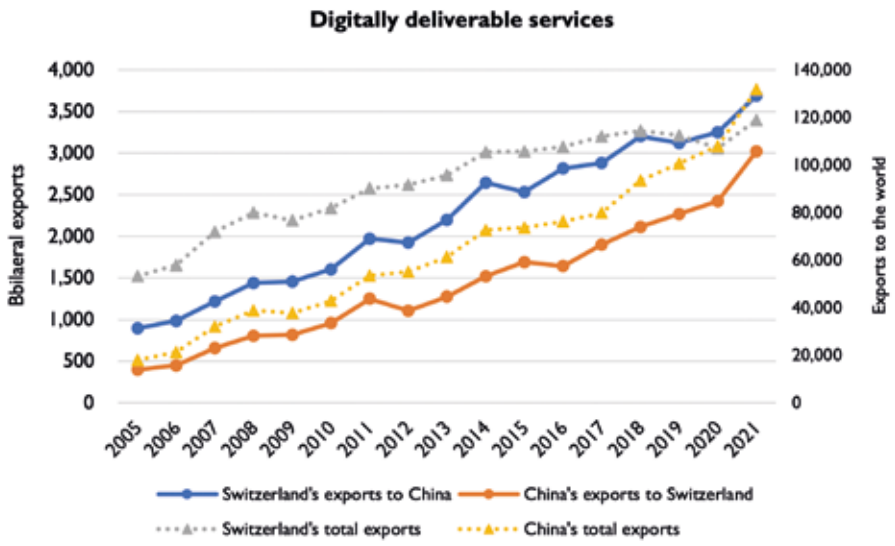
(2.1) Structural change towards trade in knowledge-intensive and digitally deliverable services

The first clear trend is that the trade in services between the two countries has disproportionally increased in knowledge-intensive sectors such as charges for the use of intellectual property and information and computer and telecommunication (ICT) services, when compared to transport, travel and goods-related services (again, see **Table 3.3**). This pattern is consistent with trends in the global services trade sector as summarized by the World Bank and WTO (2023), as the advancement of ICT technologies has, in turn, led to more digitalized trade. The COVID-19 pandemic further accelerated the growth of digitally delivered services. This digital transformation is a major reason why exports of digitally deliverable services have expanded at a much faster rate between 2005 and 2021 than more traditional sectors. This pattern is evident in the bilateral trade services relationship between the two countries, particularly in China's services exports to Switzerland.

The trade in digitally deliverable services[1] depicted in **Figure 3.5** shows steady growth, albeit with slight fluctuations. Moreover, the growth of Switzerland's exports of digitally deliverable services to China gradually becomes higher than that of Switzerland's total exports of other services, a trend that becomes especially pronounced after 2014 when the SSFTA came into effect. Within the digital services sector, charges for the use of intellectual property comprise the major part of Swiss exports to China, with a share of 47.8%. On the Chinese side, 'other business services', which include R&D services, professional and management consulting services, and technical and trade-related services account for the majority of exports of digitally deliverable services to Switzerland, with a share of 67.2%.

[1] Digitally deliverable services (DDS), or services that can be delivered over information and communication technology (ICT) networks are calculated as an aggregation of insurance and pension services, financial services, charges for the use of intellectual property, telecommunications, computer and information services, other business services and personal, cultural, and recreational services, following the definition of UNCTAD STAT (https://unctadstat.unctad.org/wds/TableViewer/summary.aspx).

Figure 3.5: Development of trade in digitally deliverable services (in million USD)

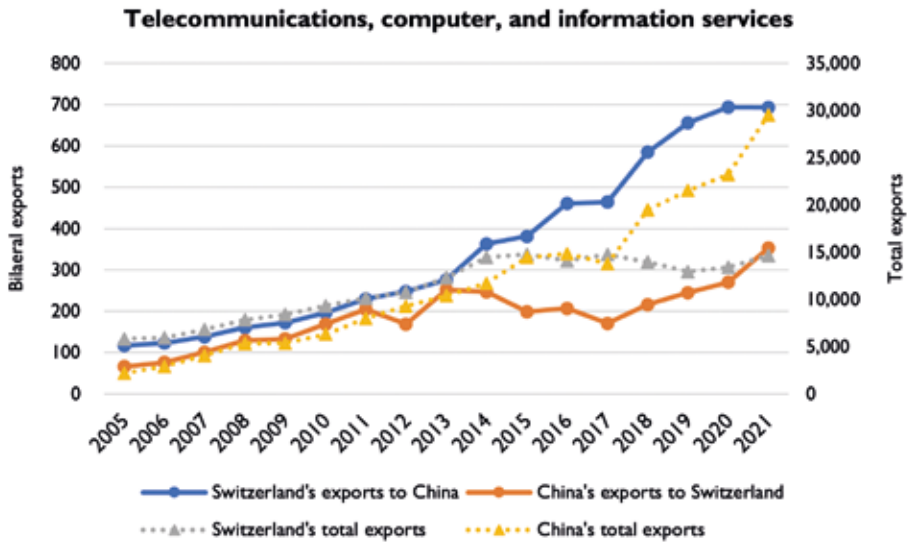


Source: OECD-WTO Balanced Trade in Services Database.

(2.2) Switzerland's exports of ICT services to China have grown substantially since 2014

As is shown in **Figure 3.6**, starting in 2014, the year when the SSFTA came into force, there is a significant increase in Swiss exports of ICT services to China despite the flattening trend of total Swiss exports of ICT services to the rest of the world since 2015. This growth can be attributed to the rapid growth of China's robust ICT market, driven by an expanding middle class and heightened digital connectivity. Switzerland's well-established reputation for delivering high-quality ICT services, marked by precision, reliability, and a strong commitment to data security, has made it an appealing choice for Chinese businesses and consumers seeking top-notch technology solutions. Additionally, Switzerland's dedication to digital innovation, supported by its robust academic institutions and research centres, has empowered Swiss ICT companies to develop cutting-edge solutions that are in high demand in China. On the other hand, China's exports of ICT services to Switzerland experienced declines in 2014 to 2017, followed by a recovery growth path that started in 2018.

Figure 3.6: Development of trade in ICT services (in million USD)



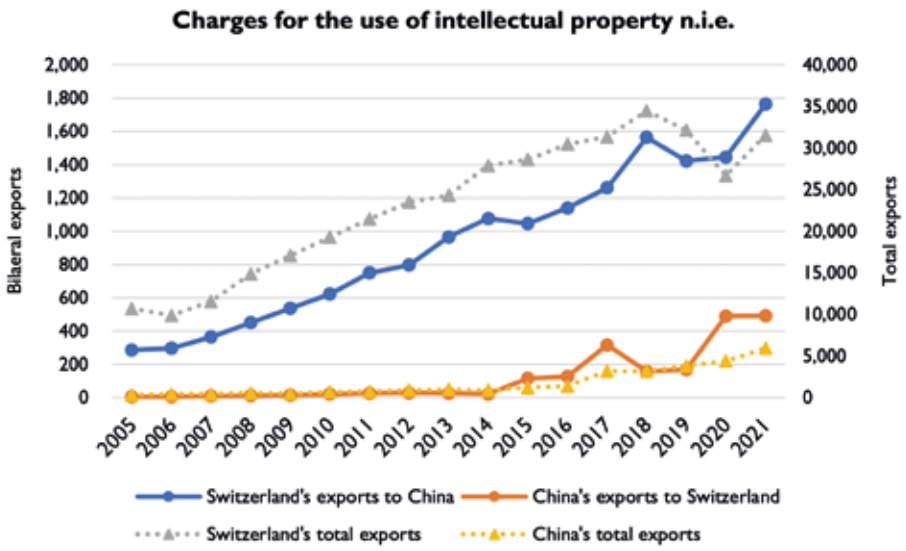
Source: OECD-WTO Balanced Trade in Services Database.

(2.3) Charges for the use of IP: Steady growth in Swiss exports and a surge in Chinese exports after 2014

The SSFTA contains a comprehensive chapter on protecting intellectual property (IP) rights which provides support for the development of cross-border charges for the use IP between the two countries. This was the first time that China explicitly stipulated specific rights and obligations related to IP protection other than general principles and declarative cooperation clauses. Switzerland and China have committed to apply a higher level of standards than the multilateral standards of the WTO TRIPS Agreement, including protection of commerce marks, the patentability of biotechnological inventions, test data guard, protection for geographical indications, protection of new plant varieties and so on. The SSFTA also improves the transparency and convenience of rights holders' protection.

Figure 3.7 shows that Switzerland's exports of charges for the use of IP to China has been growing steadily (the exceptions are the years 2015, 2019, and 2020). At the same time, China's exports of charges for the use of IP to Switzerland and to the rest of the world, though relatively much smaller in size, have experienced major growth since 2014. This growth could be due to the increase in innovation activities and patents in China.

Figure 3.7: Development of trade in charges for the use of intellectual property (in million USD)



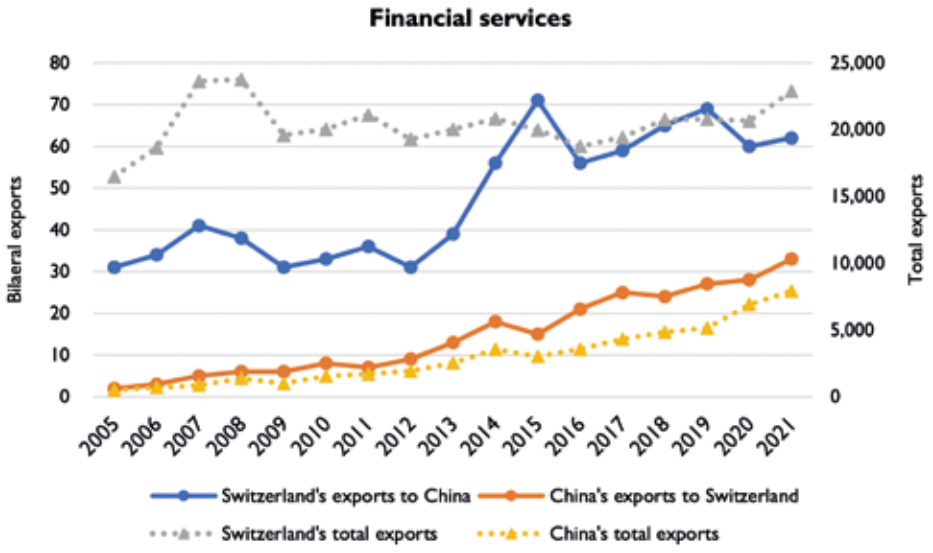
Source: OECD-WTO Balanced Trade in Services Database.

(2.4) Trade in financial services: Significant increases after the SSFTA took effect

The last sectoral analysis is on the trade in financial services. Switzerland's exports to China in this category have been on a continuously ascendant path and are at a much higher level (about 1.5 times more) than in the pre-SSFTA period. China's exports of financial services to Switzerland have also, albeit from a much lower starting level, seen a steady increase and have almost doubled since the SSFTA came into force (see **Figure 3.8**).

These developments can be attributed to the higher commitments made in the SSFTA when compared to those included in the GATS. For instance, Switzerland has committed to market access for cross-border aircraft liability insurance and Swiss Franc (CHF) securities issues. China has raised its commitments on market access in areas such as securities services. The SSFTA has also been valuable in setting more precisely specified rules compared to the GATS, e.g., regarding transparency and licensing procedures, which has enhanced legal security. Moreover, since 2013, the People's Bank of China (PBC) and the State Secretariat for International Financial Matters (SIF) have been engaged in a regular dialogue on financial matters. In November 2015, the PBC authorised the Zurich branch of China Construction Bank (CCB) to act as the Chinese Yuan (RMB) clearing bank in Switzerland, to facilitate and promote the use of the RMB in cross-border transactions between businesses and financial institutions. The development of a Swiss RMB market has also strengthened Switzerland's position as a financial centre (Economiesuisse, 2016).

Figure 3.8: Development of trade in financial services (in million USD)



Source: OECD-WTO Balanced Trade in Services Database.

(3) Future prospects for Sino-Swiss trade in services

The future prospects for cooperation between China and Switzerland in the trade in services holds substantial promise. Both nations have recognized the significance of services and the SSFTA has played a critical role in boosting the development of such trade in many areas. The key factors for future growth are increasing market access and market demand, innovation, new post-COVID opportunities, and improved official dialogue between the two countries.

China has advanced a "new development philosophy" (**新发展理念**) that is based on innovative, coordinated, green, open, and shared development, and will require deepening structural reforms on the supply side of the trade in services domestically, as well as increasing the openness of the service sector to international competition. The reforms are aimed at reducing market access restrictions for foreign investment, fostering innovative development in the trade in services, and creating open platforms for service trade innovation (MOFCOM, 2020). China remains dedicated to actively increasing the import of high-quality services, an approach that seeks mutually beneficial win-win outcomes and invites countries to seize the opportunity to access its vast market. Since China established its first pilot free trade zone (PFTZ) in Shanghai in 2013 to explore the construction of a relatively independent service trade zone focusing on expanding the opening up of the service sector, the number of such zones has expanded to 21, with a total of 302 institutional innovations that have been replicated and promoted nationwide. These include negative lists for foreign investments, "single window" customs clearance, and split accounting management of free trade accounts. Most recently, in June 2023, the State Council of China issued 'Several Measures for Piloting Docking with International High-standard Institutional Opening in Conditional Pilot Free Trade Zones and Free Trade Ports', that advanced measures such as extending the residence permits for foreign experts and senior executives, expanding the recognition of overseas professional qualifications, ensuring the release of air and express cargo within 6 hours, and facilitating the clearance of general cargo within 48 hours. Moreover, while foreign investments in the manufacturing sectors have already seen a substantial relaxation of restrictions in the PFTZs, the next focus will be on reasonable reductions in the negative list for foreign investments in the service sectors.

Finally, Switzerland's innovation prowess has become a driving force for the trade in services between Switzerland and China. As China emphasizes high-quality and innovation-driven development, Chinese businesses should be increasingly drawn to Switzerland. New and ever more numerous opportunities will emerge in areas such as FinTech, e-commerce, digital healthcare, and smart city solutions. As for areas related to environment protection, given China's focus on ecology and sustainability, Swiss expertise in environmental services should find a receptive market in China. Collaboration in waste management, renewable energy, and sustainable urban planning is likely to grow, with positive implications for sustainable development.

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3.3 An Analysis of China's FTA Investment Provisions

by Siqi Li and Yingxin Du (University of International Business and Economics)

(1) Evolving trends in China's FTA investment provisions
In the wake of growing bilateral investments and the acknowledgment of their importance in promoting economic growth and cooperation, China has been active in creating an extensive network of investment treaties that govern and protect international investment. China has signed more than 130 bilateral investment treaties (BITs) that establish rules to protect investment. In addition to BITs, after its WTO accession, China accelerated signing FTAs that contain more comprehensive investment provisions. Currently, China maintains 19 FTAs and is negotiating eight more. The investment provisions in China's FTAs basically cover all traditional investment-related issues including investment definition, investment liberalization, investment protection, dispute settlement, exceptions, and transparency, etc. After a review of these FTAs, we categorize China's FTA investment provisions into three types: version 1.0, version 2.0 and version 3.0. **Table 3.4** provides some representative agreements containing each of these categories. The breadth and depth of each category differ, indicating an evolving trend in China's international investment rule-making.

The investment provisions in version 1.0 are not substantial. One typical case is the Sino-Swiss FTA (SSFTA). It contains only simple provisions on investment promotion and review. Other investment provisions such as investment definition, investment promotion and protection, and arbitration, etc., are stipulated in the Sino-Swiss Agreement on the Reciprocal Promotion and Protection of Investments (Sino-Swiss BIT) signed on 27 January 2009. To date, there has been no upgrade to the investment provisions agreed by China and Switzerland.

The investment provisions in version 2.0 are more substantial in terms of investment liberalization and promotion. Typical cases in this category include the China-ASEAN FTA, the China-New Zealand FTA, and the China-Australia FTA. The China-ASEAN FTA has undergone several rounds of upgrades, and improved the provisions of investment promotion and facilitation in 2015. The China-New Zealand and China-Australia FTAs incorporated individual investment chapters that were upgraded from the initial BITs.

The investment provisions in version 3.0 are even more advanced and represented by the Regional Comprehensive Economic Partnership (RCEP) and China-EU Comprehensive Agreement on Investment (CAI). RCEP is the world's largest FTA, covering about 30% of global GDP and trade in goods. It is an example of a successful FTA model with comprehensive investment provisions that can manage the diverging interests of developing and developed economies. The CAI is an investment agreement negotiated between China and the EU. As regards investment, the CAI is the most ambitious agreement that China has ever concluded. Although the CAI has not yet come into force, it signals China's determination to open up and can have positive implications for the China-EU investment relationship and the rest of the world.

What are the investment provision trends ascertainable from China's FTAs?

(2) The content of China's FTA investment provisions

In terms of investment definition, the investment provisions in China's FTAs apply to investments made before or after the agreement enters into force. In the Sino-Swiss BIT, the term "investment" includes every kind of asset, including direct and indirect investments.

In terms of investment liberalization, provisions generally include: (1) national treatment and most-favored-nation (MFN) treatment in the pre-establishment phase of investment; (2) prohibition of performance requirements; (3) the appointment of senior management and boards of directors (SMBD) without regard to nationality; and (4) the "positive list" or "negative list" approach to scheduling commitments and reservations. The "positive list" approach implies that only sectors listed in the schedule are subject to the agreement's rules on investment. The "negative list" approach is more liberalized, meaning that the agreement's obligations are applied to all sectors with the exception of those that appear on the list of non-conforming measures. In version 1.0, the SSFTA and BIT do not apply the national treatment and MFN treatment to the pre-establishment phase of investment, and adopt a positive list scheduling approach. In version 2.0, the MFN treatment becomes (with certain exceptions) applicable to the pre-establishment phase of investment.

Version 3.0 FTAs have shown progress in China's opening up to foreign investment. In the RCEP and CAI, China applies the national treatment and MFN treatment to the pre-establishment phase of investment. In particular, China has introduced the prohibition of mandatory technology transfer, which goes beyond WTO commitments.

Regarding the scheduling approach, in the RCEP, China applies a "negative list" in non-service sectors. In the CAI, China and the EU adopt a mixed approach in the manufacturing and services sectors, applying a "positive list" status to the prohibition of quantitative restrictions, and a "negative list" status to commitments regarding national treatment, MFN treatment, performance requirements and SMBD nationality requirements.

Other highlights of the CAI include China's liberalization of services, notably in telecommunications, financial services, private healthcare, environmental services, R&D and air transport-related services. Importantly, China also offers new targeted market openings that go beyond its current autonomous level of liberalization, consisting of lifting restrictions on joint venture requirements (in hospitals and clinics), economic needs tests (in electric car manufacturing), foreign investment bans (in cloud services) or monopoly rights (in computer reservation systems). These commitments in the services sector will benefit both the EU and other nations by improving the overall business environment in China.

In terms of investment protection, provisions generally include: (1) national treatment and MFN treatment in the post-establishment phase of investment; (2) minimum standard treatment, such as fair and equitable treatment, full protection and security treatment, etc.; (3) expropriation; (4) compensation for losses; and (5) free transfer of funds. Besides the China-Australia FTA and China-EU CAI that specify further negotiation on investment protection in the future work program, other Chinese FTAs have more or less incorporated content on investment protection.

In terms of dispute settlement, China's FTAs contain a mechanism for consultation which is preferable in solving investment disputes between China and other contracting parties. In addition, almost all Chinese FTAs provide a state-to-state arbitration mechanism and investor-state dispute settlement. The investor-state dispute settlement is a key feature that allows investors to enforce their rights in case of alleged breaches of the agreement by the host country.

In terms of transparency, version 1.0 FTAs—including the SSFTA—do not include a transparency clause. China has incorporated transparency obligations in versions 2.0 and 3.0 for regulatory and administrative measures as well as on procedural fairness and the right to judicial review.

(3) The potential direction of upgrades to the SSFTA investment provisions

An upgrade to the SSFTA would be in line with the developing trade and investment relationship between China and Switzerland, and would be mutually beneficial. Compared with China's version 2.0 and 3.0 FTAs, the Sino-Swiss investment provisions have much room for upgrades. The possible negotiation agenda could follow the more recent Chinese approach to FTAs, upgrading the existing Sino-Swiss BIT into a comprehensive Investment Chapter in the SSFTA.

Experience could be drawn from China's recent FTA practices and unilateral opening up, especially the achievements on investment liberalization. The negotiation could focus on the extension of national treatment and MFN treatment to the pre-establishment phase of investment, and see changes from "positive list" to "negative list" status in terms of market access commitments. In addition, limitations on both performance requirements and SMBD nationality requirements would be desirable to ensure a liberalized business environment for foreign investment. Other provisions, such as transparency, dispute settlement processes, etc., could also be incorporated or improved to enhance legal certainty and the predictability of the investment environment. In terms of the above, the RCEP and CAI agreements represent the current wave of modern investment provisions, and provide model texts for updating and upgrading the SSFTA.

Notes on Table 3.4: The analysis on investment provisions signed between China and Switzerland includes both the SSFTA and the Sino-Swiss BIT. Strictly speaking, the CAI is a standalone and comprehensive investment agreement rather than a FTA and covers both trade and investment.

Data source: China FTA Network (http://fta.mofcom.gov.cn); European Commission. (2020, December 30). EU-China comprehensive agreement on investment. Retrieved from https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/china/eu-china-agreement_en

Table 3.4: The Content of Investment Provisions in China's FTAs

Version			Version 1.0	Version 2.0			Version 3.0	
Partner			Switzerland	ASEAN	New Zealand	Australia	RCEP	CAI
Type			North-South	South-South	North-South	North-South	Mega-regional	North-South
Signing date			Jul. 2013	Nov. 2002 (upgraded in Nov. 2015)	Apr. 2008	Jun. 2015	Nov. 2020	Dec. 2020
Relationship with other agreements			In parallel with the BIT	An upgraded version of the BIT	An upgraded version of the BIT	An upgraded version of the BIT	A combination and upgrade of FTAs signed between China and other RCEP parties (excl. Japan)	More comprehensive than BITs signed between China and EU member states
Definitions and scope			●	●	●	●	●	●
Investment liberalization	National treatment	Pre-establishment				● (Australia)	●	●
	MFN treatment	Pre-establishment		●	●	●		●
		Reservations			Fisheries, maritime	Aviation, fisheries and maritime, including salvage	●	●
	Limitation of performance requirements				●	Future work program	●	●
	Senior management and boards of directors (SMBD)					Future work program	●	●
	Scheduling approach	Positive list	●	●	●	● (China)		● (Quantitative restrictions)
		Negative list				● (Australia)	●	● (National treatment, MFN treatment, performance requirements, SMBD)
Investment protection	National treatment	Post-establishment	●	●	●	●	●	●
	MFN treatment	Post-establishment	●	●	●	●	●	●
	Minimum standard	Fair and equitable treatment	●	●	●	Future work program	●	Future work program
		Full protection and security	●	●	●	Future work program	●	Future work program
	Expropriation		●	●	●	Future work program	●	Future work program
	Compensation for losses		●	●	●		●	Future work program
	Free transfer of funds		●	●	●	Future work program	●	Future work program
Dispute settlement	State-to-state dispute settlement		●	●	●		●	●
	Investor-state dispute settlement		●	●	●	●	Future work program	
	Mechanism for consultation		●	●	●	●	●	●
Transparency				●	●	●	●	●
Exceptions				●		●	●	●

3.4 The effect of FTAs on FDI: The 'Learning-by-Exporting' Assumption

Weilei (Stone) Shi (Cheung Kong Graduate School of Business) and Alexander Tonn (University of St.Gallen)

Bilateral free trade agreements (FTAs) can play a key role in advancing foreign direct investment (FDI) into the parties involved. The academic literature generally acknowledges this well-studied and positive relationship. However, the underlying firm-level mechanisms are less well understood.

The surveyed economics literature portrays a generally positive relationship between FTAs and FDI via transition channels such as higher levels of growth, market extension, increased trade, and the liberalization and improvement to investment rules, competition or property rights (Medvedev, 2012; Cherif & Dreger, 2018; Baccini & Dür, 2015). At the same time, FTAs are rather heterogenous and Gamso and Grosse (2021) emphasize that the various effects on FDI can be explained by the different provisions and depth found in FTAs as well as by other contextual factors such as pre-existing levels of property rights in the countries involved. A trade agreement that goes substantially beyond the World Trade Organization (WTO) standards or that includes specific agreements on property rights or competition relevant for FDI might translate into measurable added value and a better investment climate.

In this chapter, we aim to enrich the discussion on the macro-level effects of preferential FTAs on FDI by presenting insights from the international management literature that have only recently been incorporated into the largely economics-driven academic discussion on FTAs that has dominated to date.

The underlying firm-level processes of learning effects, information munificence and trust-building translate into competitive advantages and facilitate better investment decisions in the context of an FTA. Johanson and Vahlne (1977; 2009) emphasize the role of knowledge and relationships in their foundational internationalization process model of the firm (the Uppsala model). In the empirical observations of firm internationalization, organizations gradually move from lower commitment to higher commitment modes through stepwise incrementalism (from trade/exports to greenfield FDI). Firms starting with exports gain important market information and build relationships with local stakeholders that then become advantageous in further internationalization endeavors.

FTAs that help to advance the business environment conditions around early-stage internationalization encourage trade, which is indelibly linked to information acquisition (resulting in informational advantages), as well as trust and network building (resulting in relational advantages). For example, Prashantham (2005) highlights the importance of market information and network relationships for incremental internationalization based on the Uppsala model. Mejri and Umemoto (2010, p. 163) stress the role of experiential knowledge acquisition which "includes network knowledge (social and business network; knowledge as the network itself), cultural knowledge (knowledge of language, habits, norms, laws, behaviour...), and the entrepreneurial knowledge (knowledge of the existence of opportunities and exploiting them)". In a related manner, Vahlne and Bhatti (2019) emphasize the importance of reciprocal relationships in international business as a precondition for successful knowledge exploitation.

We expect that these two central aspects of knowledge—informational and relational—will, *ceteris paribus*, lead to more investment and innovation at the firm-level via the cumulative, evolutionary, and dynamic process of knowledge generation just described (see **Figure 3.9**). This mirrors the scholarly discussion where Welch et al. (2016, p. 791) emphasize that "in the long run, it is likely that the increased knowledge will lead to further commitments", and Johanson and Vahlne (2003, p. 98) state that: "Since knowledge is developed gradually international expansion takes place incrementally".

The association between social capital accumulation and the stages of internationalization has been observed by Puthusserry et al. (2020, p. 282). Prashantham (2005, p. 43) has pointed out that social capital does indeed positively influence knowledge learning and subsequent firm performance.

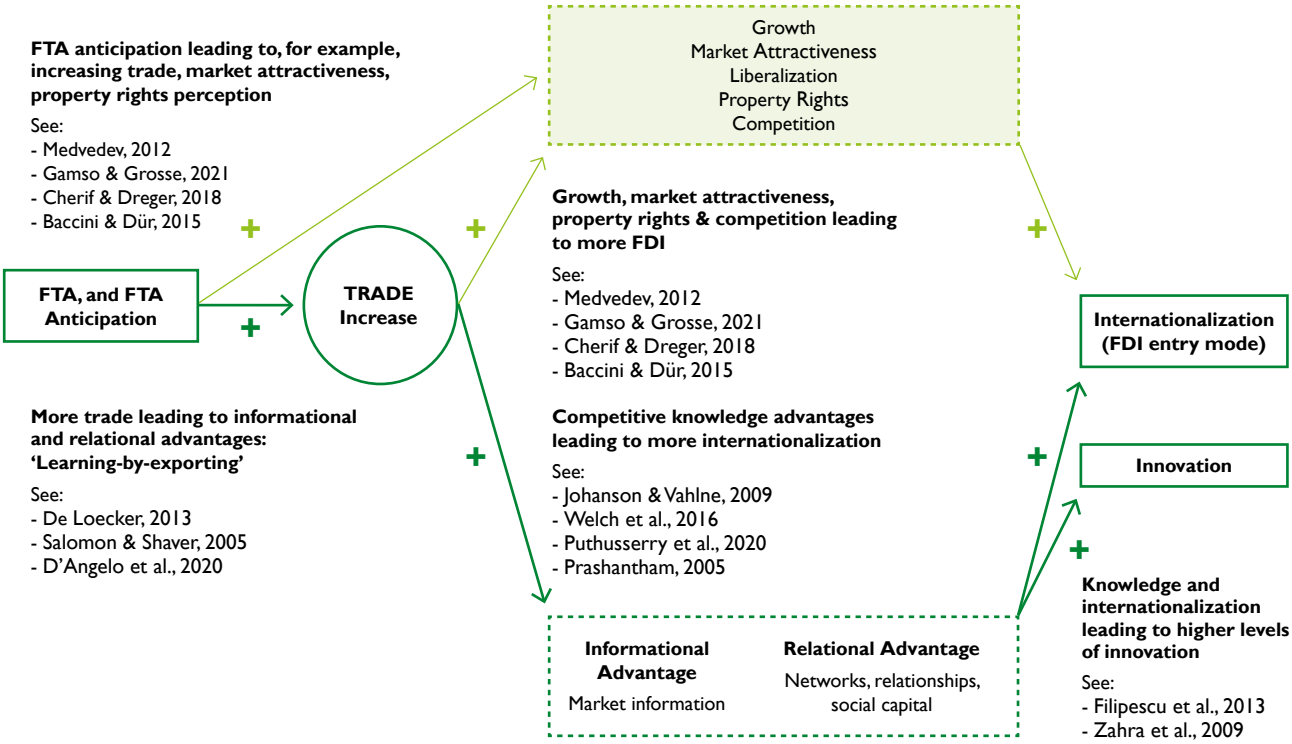
In short, an FTA might lead to (i) an immediate jump in investment in the short run (as an effect of a better investment climate; the macro pattern), and (ii) to a gradual increase in subsequent periods. We stress that this happens via dynamic and cumulative processes at the firm-level.

In a world of readily available data and information, trade-generated proprietary market information and relationships can result in competitive knowledge advantages that other firms wishing to internationalize don't possess. As Welch et al. (2016, p. 790) write, "(…) while there is a wealth of information at decision-makers' fingertips, it needs to be

processed, learnt, absorbed and acted upon". Linking informational and relational advantages to a trade transaction allows it to become the basis of action in the firm for subsequent sequential internationalization, innovation and profit making (Boermans & Roelfsema, 2016; Damijan et al., 2010; Golovko et al., 2022; Hagemejer & Kolasa, 2011; Kafouros et al., 2008; Zahra et al., 2009).

The proposition that FTAs may accelerate knowledge generation from early-stage market entry modes is embedded in the scholarly discussion around 'learning-by-exporting', which becomes especially visible in terms of ex-post productivity increases and innovation (Filipescu et al., 2013; De Loecker, 2013; Salomon & Shaver, 2005). D'Angelo et al. (2020) have shown that changes in short-term export activities affect the level of firm innovativeness in multiple markets. In contrast, the effect of external changes, such as those brought about by FTAs, on firm-level outcomes in one country via 'learning-by-exporting' has, so far, been neglected in the management literature. This context could prove to be an interesting venue to test potential causal relationships via econometric designs such as, for example, regression discontinuity or difference-in-difference in further studies (Angrist & Pischke, 2009). Does a short-term acceleration in exports induced by FTAs affect knowledge accumulation and hence impact firm-level internationalization and innovation capabilities?

Figure 3.9: The effect of FTAs on FDI: 'Learning-by-exporting'?



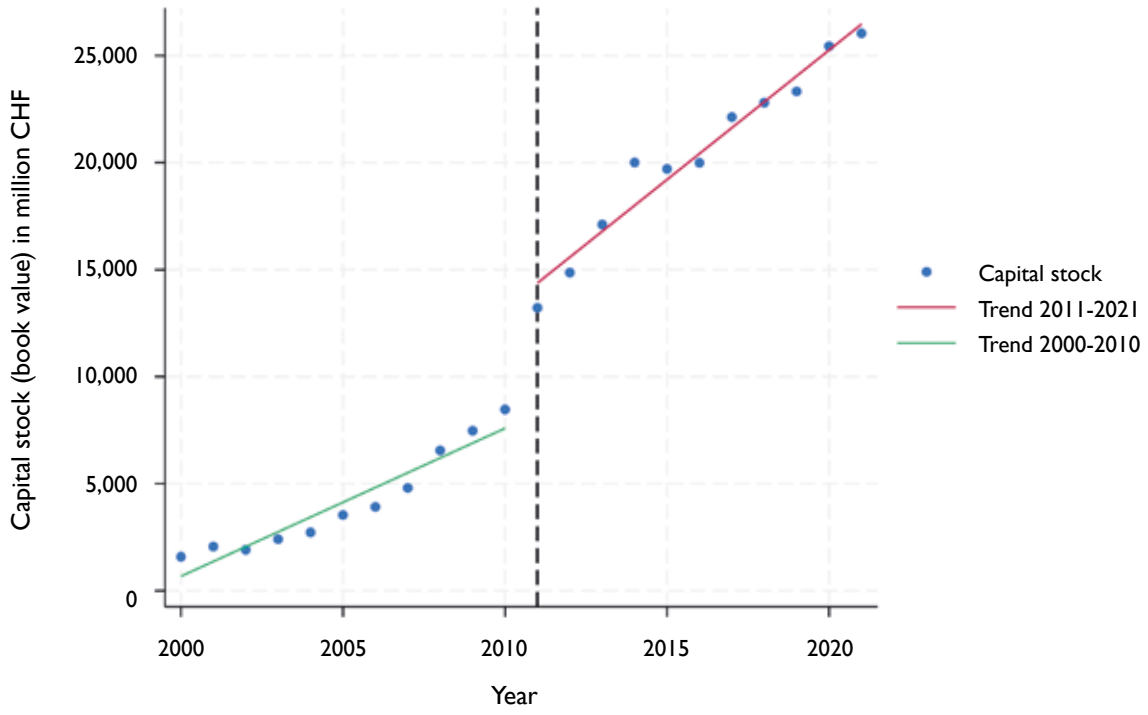
Source: Authors.

The impact of the announcement of the Sino-Swiss FTA on country-to-country FDI

In the case of the Sino-Swiss FTA (SSFTA), one can observe an immediate uptick in the capital stock of Swiss companies investing in China in 2011, the year that the negotiations were announced (see **Figure 3.10** below). This is in line with expectations in the literature that FTA provisions stimulate FDI (via a better investment climate, lower risk perception or market attractiveness, see **Figure 3.9**). For instance, one might conjecture that on account of the moderate level of property rights protection present in China in 2011, the SSFTA might have provided a perception of security for potential Swiss investors. For reference, China had a property rights value of 20 in 2011 in comparison to a level of 62 in 2021; see The Heritage Foundation (2011) and compare with Gamso and Grosse (2021).

The long-run trend in Swiss-Chinese FDI appears to change slightly in the aftermath of the announcement of the FTA (indicated by the steeper bivariate regression/trend line from 2011-2021) resulting in higher levels of book value FDI from Switzerland to China. The increase in FDI between 2011-2021 could therefore indicate, notwithstanding rigorous econometric tests, real world support for the management literature referenced in this article.

Figure 3.10: FDI from Switzerland into China (as per capital stock and book value), period 2000-2021



Data source: Authors, based on data from Swiss National Bank (2022).

Understanding firm-level decision-making processes on FDI

Insights from an exchange with Nicolas Musy, founder and head of China Integrated:

- **Resistance to the 'FTA to FDI' relationship:**
  "(…) for some companies, the FTA is a reason not to invest in China. Efficiencies of automated production in Switzerland would make it less economical to produce in China and since there are no duties, selling from Switzerland becomes more economical."

- **Support for the 'FTA to FDI' relationship:**
  "(…) more trade relations also favor looking at more opportunities in the destination market, and in some cases such opportunities need to be acquired through local investment. The same customers who produce more efficiently in Switzerland may need R&D and customization in China to be closer to their customers and customize their products on the spot. Or in some cases some processes of production … at the end of the production process, like packaging … would still be more efficient if the work is done in China. This may generate an investment, but not a major one with full production."

  "Swiss companies invest in the markets they sell. Wherever they sell, they invest. Sometimes into factories and production capacity and sometimes into sales capacity and market penetration."

- **Support for the 'relational advantage' association:**
  "Actually, the feeling to conduct business is more important than information and market knowledge. Confidence and trust, based on past track records, people and organizations you have been working with probably matters most."

  "And of course, the more you trade, the more knowledge accumulation and direct experience with people. It's the relationships on the ground, the people and agents that create trust and influence the ability to conduct business. As such, the introduction of an FTA has an indirect effect on FDI via intensified trade and the learning effects that more business relationships bring about."

Source: Authors communication with China Integrated, August and September, 2023.

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Notes

Notes

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