

# **China – Electronic Payment Services: discrimination, economic development and the GATS**

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**Abstract:** This paper provides a legal–economic analysis of the unappealed WTO Panel Report in *China – Certain Measures Affecting Electronic Payment Services* (WT/DS413/R). The core issue was whether China’s measures that resulted in there being only one dominant supplier of electronic payment services (EPS) in China violated the specific commitments made by China under the GATS. The panel ruled that the measures did not violate China’s market access commitments because there were no explicit limitations on the entry of foreign suppliers, but that the measures were inconsistent with China’s national treatment commitments in that they modified the conditions of competition in favour of domestic suppliers. This case illustrates the complexity in interpreting WTO Members’ commitments under the GATS.

## **1. Introduction**

Given the increasing importance of the services sector in the world economy, it might be expected that disputes involving trade in services would form a significant part of the caseload of the WTO dispute settlement system. Not so. Since 1995, there have been only 21 dispute settlement proceedings initiated at the WTO involving claims under the *General Agreement on Trade in Services* (the ‘GATS’), out of a total of 454 disputes as of the end of 2012. Moreover, there does not appear to be any real increase in disputes under the GATS in recent years: since 2005, there have been only six disputes initiated involving the GATS, compared to 37 under the

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*Anti-Dumping Agreement* and ten under the *Agreement on Sanitary and Phytosanitary Measures*.

This could, of course, be explained by greater compliance by WTO Members with their WTO obligations with respect to trade in services than with their obligations with respect to trade in goods. A more likely explanation, however, lies in the nature of those obligations themselves. Unlike the obligations under the *General Agreement on Tariffs and Trade 1994* (the 'GATT 1994'), which apply to trade in all goods, Members' obligations under the GATS apply only to trade in those services sectors for which Members have voluntarily assumed obligations by inscribing commitments in their Schedule of Specific Commitments. In these circumstances, services-related WTO disputes frequently turn on the interpretation of particular commitments made by the defending Member in its Schedule.

This dispute was no exception. It involved China's regulation of its electronic payment services (EPS) market. China had adopted measures that favoured the Chinese EPS company, China UnionPay Co. Ltd. (CUP), to the detriment of global providers such as Visa, MasterCard, and American Express as well as other potential domestic entrants. In effect, CUP was granted exclusive supplier status in the Chinese market for Remimbi-denominated EPS. The complainant, the United States, argued that China had made commitments in its Schedule with respect to 'all payment and money transmission services' and that the measures at issue were inconsistent with China's most-favoured-nation (MFN), market access and national treatment obligations under the GATS. The panel ruled in favour of the United States with respect to several of the national treatment claims;<sup>1</sup> but found that China had not undertaken market access commitments in its Schedule with respect to so-called 'mode 1' services for EPS and that with respect to 'mode 3' services the United States had failed to establish that China's measures imposed a limitation on market access in this sector in the form of a monopoly or exclusive service supplier. The panel therefore rejected the United States' market access claims, with one exception.

As a legal matter, the Panel Report is interesting in that it further developed the jurisprudence on the interpretation of Members' Schedules, applying that jurisprudence to the financial services sector and interpreting the GATS Annex on Financial Services for the first time. In particular, the panel's analysis of the relationship between Member's commitments with respect to market access and national treatment in a particular services sector, and how any conflicts between those commitments should be resolved, will be of interest to WTO lawyers and negotiators (though perhaps not to a broader public). However, the Panel Report raises several questions regarding the design and interpretation of the GATS. Despite CUP clearly being the sole supplier of EPS in the Chinese

<sup>1</sup> Panel Report, *China – Measures Affecting Electronic Payment Services*, WT/DS413/R, adopted 31 August 2012 (hereafter, *China–Electronic Payment Services* or the 'Panel Report').

market (i.e., having *de facto* monopoly status), the panel was unable to rule that a service supplier in such a dominant position as CUP was a ‘monopoly’ or ‘exclusive service supplier’ within the meaning of Article XVI:2(a) and Article VIII of the GATS.

## 2. Context

In this section of the paper, we first establish the procedural history, background, and facts of the case before turning to the measures at issue and the legal claims made by the United States.

### 2.1 *Background of the dispute and procedural history*

The dispute arose out of measures taken by China beginning in January 2001 that the United States considered to be inconsistent with China’s obligations under the GATS. In the United States’ view, these measures maintained ‘a regulatory environment that has entrenched CUP’s hold over the Chinese payment card market’ and enabled CUP to become a ‘dominant and international player in the EPS market’.

China UnionPay was created almost immediately after China’s WTO accession, by the State Council and the People’s Bank of China (the central bank) as a jointly owned venture between some 80 Chinese banks, with each member’s holding of shares in the entity a function of the size of the respective bank (the largest shareholder is China Construction Bank, with some 5% of the shares) (Wu, 2012). As discussed below, CUP appears to have been modeled on a structure that is found in many countries – i.e. a cooperative venture (association) that is owned by the major banks in the country and that provides services that are used by all banks. However, CUP was more than just an association formed by Chinese banks; it was created at the behest of the government and a number of regulatory provisions were implemented to ensure that the system was used. The government required that all local (RMB-denominated) EPS transactions go through CUP; that all payment cards bear the CUP logo (although joint branding was permitted); that all merchant terminals must be able to accept CUP cards; and prohibited the use of non-CUP payment cards where the issuing bank and acquiring bank were different. CUP was not subject to the threat of entry by potential foreign providers until 1 January 2007, as China’s Schedule of Commitments under the GATS listed exceptions to full market access for payment services. These were limited to five years after its accession to the WTO. The basic issue in the dispute was whether the measures pertaining to CUP constituted a market access violation after 2007.

CUP provides an inter-bank, China-wide network that ensures interoperability between banks in China for card payments. Rapid growth in domestic payment card adoption, driven by the high sustained growth rates of the Chinese economy, meant that in its first decade of existence CUP grew exponentially to become the 2nd largest global bankcard processing network in terms of number of cards issued

and transactions processed.<sup>2</sup> To date, CUP has issued some 3.5 billion payment cards, most of which are debit cards – which account for three-quarters of total turnover. Around one-quarter of all of CUP cards are co-branded with foreign companies (Visa, MasterCard, etc.) and CUP has an arrangement with foreign card providers to give customers access to payment services when they travel abroad (e.g., in the United States, CUP card holders can use their cards wherever the Discover card is accepted) (Johnson, 2013). As of 2012, CUP had an international network spanning some 140 countries. Most of CUP's cards have been issued in China, but the company has begun to issue cards internationally as well. Chinese consumers are increasingly attractive to credit card companies as they tend to spend significant amounts when traveling. Reportedly they now account for a quarter of global consumption of luxury products (Wu, 2012).

Given that foreign credit card companies were only able to issue cards that could be used for non-RMB payments (i.e., for purchases made by card holders while abroad), the strategy they pursued was to issue cards that were jointly branded with CUP. These 'dual-currency' cards allowed holders to pay for goods or services through CUP for transactions in China, and via the foreign partner's network for transactions outside China. Starting in 2005, CUP began to expand internationally. As an incentive, it offered its clients (and foreign merchants) using the China UnionPay system an exemption from brokerage and foreign exchange processing fees. Use of VisaNet or MasterCard generally involves a currency transaction fee of 1% or more of the value of the transaction. In 2009, Visa reportedly informed UnionPay that its practice of allowing joint card holders to use CUP for transactions outside of China violated the terms of their agreement. CUP objected and, as a result of this disagreement, Visa was reportedly unable to do any new business with CUP (in contrast to companies such as MasterCard or American Express) (McMahon, 2011). In August 2010, Visa took public action by informing its member banks globally that they were prohibited from using the CUP settlement channel when processing transactions outside China if jointly branded cards were used (noting that this was not targeted at CUP per se but was part of its general policies). The penalty for infractions was \$25,000 per transaction (Xiangyang, 2010). Within weeks of Visa's action, on 15 September 2010, the United States initiated WTO dispute settlement proceedings by requesting formal consultations with China. It appears, therefore, that the trigger for the WTO dispute settlement proceedings was the expansion of CUP internationally (Anderlini, 2010).

As consultations did not resolve the dispute, the United States requested the establishment of a panel on 11 February 2011. The panel was established at the

<sup>2</sup> Consumers made \$3.3 trillion in purchases with UnionPay cards worldwide in 2012, second only to Visa (\$5.7 trillion). Third ranked MasterCard had global turnover of \$2.7 trillion. The 3.5 billion UnionPay-branded cards in circulation compares with 2.5 billion for Visa and 1.2 billion for MasterCard (Johnson, 2013).

meeting of the WTO Dispute Settlement Body (DSB) on 25 March 2011. At the request of the United States, the WTO Director-General composed the panel on 4 July 2011. The Panel Report, which, as discussed below, found in favour of the United States on many, but by no means all, of its claims, was circulated on 16 July 2012. As the Report was not appealed within the time limit of 60 days, it was adopted by the DSB on 31 August 2012.

After negotiations between the parties, on 26 November 2012, the United States and China notified the DSB that they had agreed that China would have a ‘reasonable period of time’ of 11 months from the date of adoption of the Panel Report by the DSB to implement the panel’s findings. Thus, the reasonable period of time expired on 31 July 2013. At the time of writing (summer 2013), detailed information about China’s implementation of the panel’s findings is not yet available. Press reports in June 2013 suggested that Chinese authorities had prohibited a joint venture between a Hong Kong-based firm and Mastercard to provide Renminbi-based EPS for mainland China.<sup>3</sup> On 12 July 2013, however, China provided a status report on implementation to the DSB, in which it stated that it had repealed five measures relevant to the dispute and announced that it would no longer be implementing others.<sup>4</sup> It is not clear however, how these changes affect the Chinese EPS market or whether the United States will challenge China’s implementation in compliance panel proceedings under Article 21.5 of the Dispute Settlement Understanding (DSU).

## 2.2 *Factual aspects*

This dispute involved the sort of payment card transactions that all of us do on a daily basis. The panel gave a detailed description of the process involved in those transactions. ‘Payment cards’ refers to bank cards, credit cards, debit cards, check cards, ATM cards, prepaid cards, and other types of cards. The panel classified these as either: (1) ‘pay later’ cards, such as credit and charge cards, where the user may either card a balance on its account or must pay the balance in full when the statement is received; (2) ‘pay now’ cards, such as debit cards, where the user’s payment is directly linked to an existing account which is drawn down in real time; and (3) ‘pay before’ cards, such as prepaid cards, which are issued to people who deposit money into the account linked to the card.<sup>5</sup>

Several different entities may be involved in payment card transactions. ‘Issuers’ are institutions, usually banks, which make payment cards available to card

3 The company concerned, an online payment platform called EPayLinks, which had formed a partnership with Mastercard, was prohibited from issuing Renminbi-denominated payment cards. Reportedly, this decision was taken in part because the proposal circumvented CUP. See Rabinovitch and Anderlini (2013).

4 *China–Electronic Payment Services*, WT/DS413/9/Add.1 (12 July 2013).

5 Panel Report, paras. 7.12–7.13.

holders. The issuers set the terms for the cardholders, including fees, interest rates, credit limits, and payment schedules. The issuer approves point-of-sale transactions, collects funds from the card holder, and transmits these funds to pay the obligations incurred by the card holder. Acquiring institutions or ‘acquirers’ – again often banks – sign up merchants to accept payments for particular payment card companies, thereby ‘acquiring’ transactions. Merchants maintain accounts with acquirers, who receive all transactions from the merchants, ensure that payment for particular transactions is credited to the proper merchant, and provide the merchant with connectivity to the appropriate payment network. Both issuers and acquirers may outsource some of their services to ‘third-party processors’ that provide payment-related services on behalf of the issuers or acquirers.<sup>6</sup>

Payment card companies, which include such well-known brands as Visa, Mastercard, American Express, etc., promote their own brands of card, which they license to both issuers and acquirers. The payment card companies set the rules and standards for use of their products and participation in their payment networks. They process transaction authorization and clearing data and help to settle funds between issuers and acquirers. They may also provide guarantees to issuers and acquirers to indemnify against settlement losses for failure of an issuer or acquirer to meet its payment obligations.

There are two main ‘models’ that characterize the EPS industry. The first is known as the ‘four-party’ or ‘open-loop’ model. In these transactions, the issuer and the acquirer deal directly with the card holder (buyer) and the merchant (seller), respectively, rather than dealing with them through a payment card company. In an open, four-party model, the payment card company does not issue the cards, but rather owns and operates the networks that connect the issuer and the acquirer. Visa is the largest example of a payment card company that uses an open system. The other type of model is known as the ‘three-party’, ‘closed-loop’ or proprietary system. Here the payment card company plays a bigger role in the transaction, issuing the cards, handling the acquisition of transactions, and processing the transactions. American Express is the foremost example.<sup>7</sup>

The United States took a broader view than China of the nature of the services involved in the dispute. The United States defined the EPS at issue as ‘electronic payment services for payment card transactions’, covering all EPS relating to a broad range of payment cards. China, however, argued that the services described by the United States in its panel request, related only to inter-bank payment card transactions where the issuer is unrelated to the acquirer. However, the panel noted that as a formal procedural matter, the services at issue in the dispute were those identified by the United States in its panel request, which the panel considered to include the broader range of services claimed by the United States. In addition, the

<sup>6</sup> Panel Report, paras. 7.15–7.17.

<sup>7</sup> Panel Report, paras. 7.18–7.20.

panel clarified that transactions under the three-party model and services provided by third-party processors were within the scope of the dispute and that it made no difference whether the services at issue constituted one integral service – as argued by the United States – or a number of different services – as argued by China.<sup>8</sup>

Historically, the EPS industry has tended to be dominated by one or just a few suppliers, often an entity that is a cooperative venture that is jointly owned by the major banks in a country – the parties that are the issuers and/or acquirers. Thus, for example, until they were spun off in the mid-2000s, Visa and MasterCard were owned by consortia of banks and operated as non-profit associations. The same is true in other countries – for example there is one single retail payment system operating in France: the French automated clearing house, *Système Interbancaire de Télécompensation* (SIT). It is managed and operated by the *Groupe SIT*, an association of 17 banks that includes the Bank de France. In Belgium, the Center for Exchange and Clearing is the sole national automated clearinghouse operated as a non-profit entity that is owned by the banks (BIS, 2003).

This type of organizational structure is a reflection of the economies of scale and network externalities that characterize card payment systems. It makes sense for any given bank to have access to a network with the widest possible reach, as this will help it attract customers on both the consumer (buyer) and the merchant (seller) side of the market. Moreover, the greater the number of banks that participate in sharing the costs of building the needed infrastructure and agree to specific standards in terms of interconnection, security etc., the lower the ‘per unit’ costs for each bank.

From the perspective of users, network effects mean that the value of owning a card goes up the more other people also use that card (as it implies greater incentives for merchants to accept it and invest in the required terminals etc., which in turn will lower price as a result of economies of scale). Thus, there are both demand- and supply-side externalities.<sup>9</sup> This may justify government intervention, especially in instances where no network initially exists, as the individual incentives for firms to set up a network are likely to be weak – there is a market (coordination) failure that results in under-provision of the service. In practice, these economic characteristics help explain why in most countries there have been just a few (at most) national retail payment systems, and, in many countries, just one (Kemppainen, 2003). However, a distinction must be made between the ‘plumbing’ of retail financial payment services and the scope that exists for companies to offer specific services that rely on – or become feasible because of – the existence of a national payment system. In the case of China, the financial services markets have

<sup>8</sup> Panel Report, paras. 7.25–7.37, 7.61.

<sup>9</sup> See, e.g., Hunt (2003); Gowrisankaran and Stavins (2004); and Bolt (2012). Technically, the EPS market is a ‘two-sided’ market, where two distinct groups of agents (card holders and merchants) interact through an intermediary (the payment platform) and the decisions of each group affects outcomes for the other – i.e., there are external effects and interdependency. See Rysman (2009) for a discussion.

developed in a very short time frame, with much of what evolved over many decades in OECD countries being compressed into just a few years.

### 2.3 *The measures at issue*

The United States challenged six alleged measures or requirements of China's by which, according to the United States, China favored CUP. According to the United States:

- China required that all EPS transactions in China denominated and paid in RMB be processed and cleared through CUP, and that where there was a choice – domestic transactions on dual currency cards had to be routed through CUP in RMB.
- China required that any bank cards issued in China for RMB purchases in China, including dual currency payment cards issued in China, had to bear the CUP logo. According to the United States, this meant that issuing institutions that issued payment cards to consumers had to have access to the CUP system, and had to pay CUP for that access.
- China required that all automated teller machines (ATMs), merchant card processing equipment, and POS terminals in China be capable of accepting CUP cards, without having any equivalent requirements for non-CUP cards.
- China required that all acquiring institutions (that sign up merchants to accept payment cards) in China had to post the CUP logo and had to be capable of accepting all payment cards bearing the CUP logo.
- China prohibited the use of domestically issued non-CUP payment cards where the issuing bank and acquiring bank were different. China also required that all inter-bank transactions for all bank cards be handled through CUP.
- China required that CUP be used to handle all RMB transactions in Macao or Hong Kong, using bank cards issued in China, as well as all RMB transactions in China, using RMB cards issued in Hong Kong or Macao.<sup>10</sup>

### 2.4 *China's commitments in its GATS Schedule*

China had made a commitment in its GATS Schedule that was relevant to its obligations with respect to EPS. In Sector 7B of China's Schedule, under the heading of 'Banking and Other Financial Services', the services with respect to which China undertook certain market access and national treatment commitments included:

- (d) All payment and money transmission services, including credit, charge and debit cards, travellers cheques and bankers drafts (including import and export settlement).

<sup>10</sup> Panel Report, para. 2.4.



The United States argued that electronic payments services fell within this category and, therefore, were subject to China's GATS commitments. China, on the other hand, argued that the services at issue fell under paragraph 5(a), subsector (xiv) of the GATS Annex of Financial Services, which covers 'settlement and clearing services for financial assets, including securities, derivative products, and other negotiable instruments'.<sup>11</sup> The panel's consideration of this issue was an important part of its ruling.

### 2.5 *The United States' legal claims*

The United States made a number of legal claims with respect to China's measures governing EPS transactions. Generally speaking, the United States argued that China's measures as described above were inconsistent with the market access provisions of Article XVI of the GATS and with the national treatment provisions of Article XVII of the GATS to the extent that China had made national treatment commitments with respect to these services.

## 3 The panel's legal findings

In this section, we discuss the WTO panel's findings on the claims brought by the United States regarding China's measures, as well as the procedural issues that arose in the case.

### 3.1 *Preliminary procedural issues*

Before turning to the substance of the United States' claims, the panel discussed two procedural issues.<sup>12</sup> First, as is common in WTO dispute settlement proceedings, China argued that certain of the United States' claims were not within the panel's terms of reference because the United States' panel request did not comply with Article 6.2 of the DSU, which requires, *inter alia*, that a panel request must 'identify the specific measures at issue and provide a brief summary of the legal basis of the complaint sufficient to present the problem clearly'. According to China, the United States' panel request failed to explain how the definition of EPS related to China's commitments in the subsectors identified in the panel request and failed to identify which modes of supply were at issue. After discussions with the parties, the panel issued a preliminary ruling on China's request before the United States filed its first submission. In the preliminary ruling, the panel concluded that China had failed to establish that the United States' panel request did not comply with the requirements of Article 6.2. The panel found that the panel request 'makes it clear that each of the requirements allegedly imposed by China is considered by the United States to be in

<sup>11</sup> Crosby (2007) notes that this matter was discussed in China's Trade Policy Review in November 2006, with the Chinese and US representatives making exactly these arguments.

<sup>12</sup> Panel Report, paras. 1.6–1.8.

breach of Articles XVI:1 and XVI:2 and Article XVII of the [GATS]' and concluded that the United States was not required to explain further how the challenged measures were inconsistent with China's commitments under the particular modes of supply.<sup>13</sup>

On a separate procedural issue, when the United States submitted English translations of some of the measures at issue in the dispute, China objected that the United States had mistranslated some words and phrases in a manner that changed the original meaning of the measures. The panel raised the issue of translation at the first meeting of the panel with the parties and suggested that if the parties were unable to agree on a translation of the measures, the panel could select an independent translator in consultation with the parties. At the second meeting, the parties agreed with the panel's proposal to appoint the UN Geneva's Conference Services Division as an independent translator. The parties were provided an opportunity to provide comments on the independent translator's views on the disputed translations. The panel subsequently relied on the independent translator's views on issues such as whether the logo required to be placed on Chinese cards was that of CUP (the United States' position) or, as China argued, a 'Yin Lian' logo, which was a symbol of bank card interoperability, although, in this instance, the independent translator informed the panel that there was ambiguity in the translation.<sup>14</sup> (The panel finally concluded that it made little practical difference whether the logo was for CUP or for the inter-bank network, because as long as CUP operated the inter-bank network, the typical card user would associate the logo with CUP or its network).

### 3.2 *The panel's order of analysis*

The panel decided to structure its legal analysis as follows. First, it interpreted China's specific commitments in its GATS Schedule regarding the services at issue in the dispute. Second, the panel evaluated the measures at issue to determine whether the various instruments referred to by the United States had the effects alleged by the United States. Finally, the panel considered whether China's measures, as analysed by the panel, were inconsistent with Articles XVI and XVII of the GATS, as alleged by the United States. While it could be argued that this led to a somewhat complicated analysis by the panel, for convenience we will follow the same order in this paper.

### 3.3 *China's commitments regarding electronic payment services*

#### 3.3.1 *Legal standards applicable to the interpretation of Schedules of Commitments*

As noted above, the panel's first task was to determine whether China had made specific commitments with respect to the services at issue in its GATS Schedule.

<sup>13</sup> See Panel Report, para. 7.3.

<sup>14</sup> See Panel Report, paras 1.9–1.12.

Before reviewing the panel’s analysis, it is worthwhile to state, as the panel did, the legal standards applicable to the interpretation of Schedules of Commitments, including GATS Schedules.<sup>15</sup>

As the panel noted, Article 3.2 of the DSU instructs panels to ‘clarify the existing provisions of [the covered] agreements in accordance with customary rules of interpretation of public international law’. This has been held to refer to Articles 31 and 32 of the Vienna Convention on the Law of Treaties (the ‘Vienna Convention’). The primary rule of interpretation is Article 31.1 of the Vienna Convention, which provides that a treaty ‘shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose’.

As the panel also noted, Article XX:3 of the GATS provides that WTO Members’ ‘Schedules of specific commitments shall be annexed to this Agreement and shall form an integral part thereof’. Thus, the customary rules of interpretation contained in the Vienna Convention apply not merely to the text of the GATS itself, but also to the interpretation of Members’ Schedules.

### 3.3.2 *The structure of Schedules of Specific Commitments under the GATS*

It is worthwhile to summarize how Members’ Schedules of Specific Commitments are structured before turning to the panel’s analysis. The key obligations of the GATS at issue in this dispute – the obligation to provide market access under Article XVI and the national treatment obligation under Article XVII – apply only to sectors for which each Member has decided to assume those obligations by inscribing a commitment in its Schedule for that sector and apply only to the limitations on those obligations inscribed by the Member in its Schedule.

Members may assume different obligations or impose different limitations on their obligations with respect to each of the four different ‘modes of supply’ listed in Article 1.2(a)–(d) of the GATS. These are as follows:

**Mode 1: Cross-border supply** – the supply of services from the territory of one WTO Member into the territory of another;

**Mode 2: Consumption abroad** – the supply of services in the territory of one Member to consumers of any other Member;

**Mode 3: Commercial presence** – the supply of services by a supplier of one Member through its commercial presence in the territory of another Member; and

**Mode 4: Presence of natural persons** – the supply of services by a supplier of one Member through the presence of natural persons of that Member in the territory of another Member.

As we shall see, this dispute involved China’s commitments with respect to Mode 1 (cross border supply) and Mode 3 (commercial presence).

<sup>15</sup> Panel Report, paras. 7.8–7.10.

Generally, Members' Schedules are structured so that for each sector for which the scheduling Member wishes to make commitments, it designates its commitments (or limitations on its commitments) in vertical columns for market access commitments and for national treatment commitments. Members may also indicate any additional commitments in a third vertical column, although no such additional commitments were at issue in this dispute. In each vertical column, the scheduling Member indicates the nature of the commitment (or the limitation on its commitment) it is making for each listed sector for each of the four modes of supply listed above. The terminology used to make these commitments is as follows:

**'Unbound':** The use of the term 'unbound' means that the scheduling Member is not making any commitment with respect to that mode and sector and, therefore, remains free to impose restrictions that might otherwise be WTO-inconsistent.

**'None':** The use of the term 'none' means that the Scheduling Member is not imposing any limitations on its market access or national treatment commitments for that mode and sector.

Where Members wish to impose limitations on commitments for a particular sector, they may do so either by inscribing those limitations in a horizontal column that would apply to all modes and all sectors covered by the horizontal column or by inscribing the limitation in the relevant vertical column (market access or national treatment) for the relevant mode.

### 3.4 *Whether China made commitments on electronic payments services*

With this explanation of how Members schedule commitments in mind, we turn, as did the panel, to the question of whether China made commitments with respect to the EPS at issue in this dispute. The United States argued that these services fell within the ordinary meaning of 'payment and money transmission services' and thus were covered by China's commitments in subsector (d) of its Schedule As mentioned, subsector (d) covered 'All payment and money transmission services, including credit, charge and debit cards, travellers cheques and bankers drafts (including import and export settlement)'. China, on the other hand, argued that this subsector was listed under the heading of 'banking services' and thus referred only to the types of services normally provided by banks.

The panel addressed this issue using a strict Vienna Convention analysis, as outlined above. Thus, the panel began by examining the ordinary meaning of the terms in dispute, i.e. 'payment and money transmission services'. The panel first examined the meaning of the terms 'payment', 'money', and 'transmission' as contained in dictionaries and glossaries. In addition, the panel also looked at industry sources for the relevant ordinary meaning of these terms, noting that while 'industry sources may define a term in a way that might reflect self-interest', it saw 'no basis to completely disregard industry sources as potential relevant evidence of

an ordinary meaning of a specific term in a particular industry'.<sup>16</sup> The panel concluded that the ordinary meaning of the term 'all payment and money transmission services' was that it referred to the entire spectrum of services that 'manage', 'facilitate', or 'enable' the act of paying or transmitting money.<sup>17</sup>

In accordance with Article 31.1 of the Vienna Convention, the panel next turned to the context of the phrase 'all payment and money transmission services', especially the context provided by the phrase 'including credit, charge and debit cards, travellers cheques and bankers drafts'. The panel found that this phrase shed light on the types of services covered by the phrase 'all payment and money transmission services' and in particular indicated that that phrase referred to the processing and completion of transactions using payment cards, including credit, debit, or ATM cards at point of sale terminals or for the purpose of withdrawing cash at ATMs.<sup>18</sup> The panel also found that the reference in subsector (d) to '(including import and export settlement)' confirmed that subsector (d) included settlement and clearing services, such as by bankers' drafts, and rejected China's argument that this would tend to mean that settlement and clearing services by other means such as by payment cards were excluded from this subsector.<sup>19</sup>

The panel then examined other elements of China's Schedule as context to determine whether they supported its preliminary conclusion that the EPS at issue fell within subsector (d) of China's Schedule. The panel rejected China's argument that the heading of 'banking services' was intended to limit the scope of subsector (d) to services provided by banks and found instead that subsector (d) also covered services within that sector when supplied by institutions other than banks.<sup>20</sup>

The panel next considered China's arguments that the services at issue fell within the definition contained in paragraph 5(a), subsector (xiv) of the GATS Annex on Financial Services, which refers to 'settlement and clearing services for financial assets, including securities, derivative products, and other negotiable instruments'. China noted that it had made no commitments in its Schedule with respect to services that fell within this category. Again applying the Vienna Convention method of examining the ordinary meaning of this term in light of its context and purpose, the panel concluded that subsector (xiv) referred to financial assets that share the common characteristic of being negotiable and therefore did not cover payment cards and payment card transactions, which are not negotiable instruments because they are not transferable and cannot be traded on a market.<sup>21</sup>

16 Panel Report, para. 7.89.

17 Panel Report, para. 7.100.

18 Panel Report, para. 7.111.

19 Panel Report, para. 7.118.

20 Panel Report, para. 7.133.

21 Panel Report, para. 7.155.

The panel also concluded that subsector (xiv) applied to the settlement of financial instruments that, unlike payment card transactions, have investment attributes.<sup>22</sup>

Similarly, the panel also rejected China's argument that the services at issue could fall within subsector (x) of paragraph 5(a) of the Annex on Financial Services, which covers 'trading for own account or the account of customers' of various instruments, including money market instruments and in particular cheques, foreign exchange, and derivative instruments. The panel concluded that the reference to cheques in subsector (x) did not affect its analysis of the scope of subsector (d) of China's Schedule.<sup>23</sup> The panel concluded that the phrase 'all payment and money transmission services' was sufficiently broad so that 'clearing and settlement services concerning transactions using payment cards' are properly classified under subsector (d).<sup>24</sup>

China also argued that the services at issue should not be treated as a single service but encompassed a number of distinct and separately classifiable services that should be classified separately. China noted that the 2001 Scheduling Guidelines stated that 'input' services should be classified separately.<sup>25</sup> The United States countered that EPS for payment card services 'constitute one integral, indivisible service. They are sold in a bundle and the service is a coherent whole, and the service supplier and service consumer are the same for the various component services.'<sup>26</sup> The panel first considered the meaning of a services 'sector' and noted that in the *US–Gambling* dispute, the Appellate Body had said that

because a Member's obligations regarding a particular service depend on the specific commitments that it has made with respect to the sector or Subsector within which that service falls, a specific service cannot fall within two different sectors or Subsectors. In other words, *the sectors and subsectors in a Member's Schedule must be mutually exclusive*.<sup>27</sup>

Thus, according to the panel, a sector may include any service activity that falls within the scope of the definition of that sector, regardless of whether the activity is explicitly enumerated in the definition of the sector or subsector.<sup>28</sup> The panel noted that the different services of 'payment' and 'money transmission' described by China cannot take place separately and concluded that it would not be incompatible with this principle to classify under a single subsector a service that is made up of a combination of different services, such as EPS, as long as the different services, when combined, result in a distinct service that is consumed

<sup>22</sup> Panel Report, para. 7.163.

<sup>23</sup> Panel Report, para. 7.168.

<sup>24</sup> Panel Report, para. 7.169.

<sup>25</sup> Panel Report, paras. 7.171–7.172.

<sup>26</sup> Panel Report, para. 7.173.

<sup>27</sup> Appellate Body Report, *United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services*, WT/DS285/AB/R, 7 April 2005, para. 180 (emphasis added).

<sup>28</sup> Panel Report, para. 7.179.

as such.<sup>29</sup> The panel also concluded that the fact that different components of EPS may be supplied by different suppliers was not a sufficient basis for classifying those components under different sectors.<sup>30</sup>

Finally, the panel examined the context provided by other WTO Members' Schedules and by the object and purpose of the GATS and found that neither pointed to a different interpretation of China's Schedule. Accordingly, having conducted a full Vienna Convention analysis, the panel found that subsector (d) of China's Schedule encompassed the EPS at issue in the dispute. Having found that there was no ambiguity in this regard in the meaning of subsector (d), the panel concluded that there was no need to have recourse to supplemental means of interpretation under Article 32 of the Vienna Convention.

China did not appeal this finding. It is worth noting, however, that in its statement at the meeting of the DSB at which the Panel Report was adopted, China criticized the panel's decision to classify what China considered separate and distinct services into a single subsector of payment and money transmission services. According to China:

The Panel's approach to services classification should be of broader systemic concern to Members as a whole. This approach, if followed in other disputes, would undermine the taxonomy of distinct and mutually exclusive service subsectors that was the foundation for negotiating and scheduling services commitments. Many service transactions involved a number of distinct services operating in conjunction with each other. Sometimes those services were provided by the same service supplier, and sometimes they were provided by different service suppliers. If services were classified based on whether they were 'necessary' or 'essential' to the provision of some other service, Members would be left with an undifferentiated mass of 'services'.<sup>31</sup>

China is correct as to the importance of maintaining the integrity of the classification of services subsectors in order to preserve the value of Members' scheduling decisions and commitments. On the facts of this case, however, it appears that the panel got the balance right here. From a simple everyday viewpoint, most consumers would probably view the process of paying for a purchase by credit card and being billed or debited for the amount of the purchase as a single transaction, albeit one that may take place in several steps. Each of the services at issue seems to have been an individual step in a linear process of charging the cardholder and receiving money in return. Thus, while the concern regarding 'input' services may be well founded and a precise definition of the distinction between separate services and components of a single service may be elusive, the

<sup>29</sup> Panel Report, para. 7.188.

<sup>30</sup> Panel Report, para. 7.188.

<sup>31</sup> See Dispute Settlement Body, Minutes of Meeting Held on 31 August 2012, WT/DSB/M/321, para. 89.

panel seems to have correctly concluded here that the various steps were components of a single service.<sup>32</sup> This is clearly an issue that panels will have to address on a case-by-case basis depending on the facts in each instance.

### 3.5 *The operation of the measures at issue*

Having concluded that subsector (d) of China's Schedule covered the EPS at issue in the dispute, the panel next turned to the question of whether the various instruments of Chinese law cited by the United States gave rise to the six requirements listed in Section 2.3 above that what the United States alleged were inconsistent with Articles XVI and XVII of the GATS. China argued that these various instruments did not operate in the manner alleged by the United States. Accordingly, the panel was required to evaluate the precise content and operation of these instruments to determine whether in fact they operated in the manner alleged by the United States to give rise to the requirements on which the United States' claims were based.

As a preliminary matter, the panel was required to consider whether the measures at issue were the various legal instruments themselves or the six requirements that, in the United States' view, flow from the operation of the instruments. China was concerned that the United States was arguing that these requirements existed 'independently' of the underlying instruments of Chinese law.

The panel sensibly took the view that since the United States sought findings on each of the six requirements, it was required to establish the existence of those requirements on the basis of concrete evidence of the existence of the requirements. The panel noted that the fact that a series of instruments of domestic law may illustrate or reflect the existence of a requirement does not preclude a panel from making a finding on that requirement as a 'measure' at issue within the meaning of Article 6.2 of the DSU.<sup>33</sup> In other words, each measure at issue may not be reflected in a single instrument of domestic law, but may arise from the operation and combined effects of two or more instruments of domestic law.

The United States also asked the panel to assess the six requirements both individually and in conjunction with each other to determine whether they were inconsistent with China's commitments under the GATS. China argued that the United States had failed to show how the instruments were related to each other in a manner that could give rise to an inconsistency. The panel noted that in several previous disputes, panels and the Appellate Body had analysed measures or legal instruments on both an individual basis and in terms of how they operated in concert or in combination and planned to follow the same approach in this case.<sup>34</sup>

<sup>32</sup> One example of what might properly be considered to be an 'input' service in this case may be the provision of computer services for the operation of ATM machines or point of sale terminals.

<sup>33</sup> Panel Report, para. 7.219.

<sup>34</sup> Panel Report, paras. 7.232–234.



The panel then reviewed the instruments identified by the United States (with the exception of certain instruments, which the panel found were no longer in effect) to determine whether they gave rise to the instruments challenged by the United States.

First, the panel found that all RMB-denominated bank cards issued by commercial banks in China must bear the Yin Lian/CUP logo on the front of the card and that all commercial banks that issue such cards must join CUP and meet its business specifications and technical standards. The panel found that these requirements did not prevent the issuance of single or dual currency cards that could be processed over more than one network in China; if such cards were issued by Chinese banks, however, they would have to bear the Yin Lian/CUP logo.<sup>35,36</sup>

Second, the panel found that China requires that ATMs, point of sale terminals and merchant processing devices that are part of the national bank card interbank processing network in China must be capable of accepting all payment cards with the Yin Lian/CUP logo. However, the panel declined to find that the requirements meant that *all* terminal equipment in China be capable of accepting cards with the Yin Lian/CUP logo. Moreover, these requirements would not prevent the acceptance of cards that could be processed over an inter-bank network other than that of CUP.<sup>37</sup>

Third, the panel examined the alleged acquirer requirements and found that China imposes a requirement that acquirers post the Yin Lian/CUP logo and that acquirers must be capable of accepting all bank cards bearing that logo.<sup>38</sup>

Fourth, the panel concluded that China requires that CUP and no other supplier shall handle the clearing of certain RMB bank card transactions that involve either an RMB bank card issued in China and used in Hong Kong or Macao, or a bank card issued in Hong Kong or Macao that is used in China in a RMB transaction.<sup>39</sup>

<sup>35</sup> Panel Report, paras. 7.293–7.299.

<sup>36</sup> One conference participant suggested that the logo requirements could have been challenged under Article 20 of the WTO *Agreement on Trade-Related Aspects of Intellectual Property Rights* (the ‘TRIPs Agreement’), which provides, *inter alia*, that the use of a trademark ‘shall not be unjustifiably encumbered by special requirements, such as use with another trademark’. It is not clear whether the United States considered this possibility. There is, as yet, no relevant jurisprudence on what constitutes the unjustifiable encumbrance of a trademark by requiring use with another trademark that would have given the United States guidance on such a claim. It is also arguable the logo requirements could be re-stated as simply requiring that cards must bear the logo of all networks capable of processing the cards, which would probably not amount to an unjustifiable encumbrance (even though it might require the use of a trademark with another. On a practical level, the logo requirements were only one aspect of the measures challenged by the United States, which may have considered that expanding the dispute to include a claim under the TRIPs Agreement would yield no additional practical benefit and might undermine the focus on its claims under the GATS.

<sup>37</sup> Panel Report, paras. 7.331–334.

<sup>38</sup> Panel Report, paras. 7.354–355.

<sup>39</sup> Panel Report, para. 7.383.

Finally, the panel concluded that none of the identified legal instruments individually mandated or established CUP as the sole supplier of EPS in respect of domestic RMB bank card transactions or otherwise prohibited the use of EPS suppliers other than CUP for such transactions.<sup>40</sup> The panel then considered whether the instruments when considered collectively had that effect, but found that the United States had failed to discharge its burden of establishing that the instruments at issue collectively mandate the use of CUP or establish CUP as the sole supplier of EPS for all domestic RMB bank card transactions.<sup>41</sup> The United States did not appeal this finding and, since under WTO law, interpretation of domestic law is primarily an issue of fact, it may have been difficult to appeal. However, in its statement at the DSB meeting at which the Panel Report was adopted, the United States criticized this aspect of the panel's findings, stating that it was 'disappointed' that the panel had 'failed to find that China's measures provided CUP with the status of a monopoly or exclusive supplier. The United States was concerned that this result failed to recognize that the opaque manner in which China's measures operated was the principal reason for any perceived evidentiary insufficiencies cited by the panel.'<sup>42</sup> Based on the evidence before the panel, it is hard not to sympathize with the United States' statement on this issue, as the evidence seemed sufficient to establish that CUP was the sole supplier. Also, as discussed below, from an economic perspective it is difficult to argue that CUP is not an exclusive supplier and *de facto* if not *de jure* a monopoly provider of services.

### 3.6 *The United States' claims under Article XVI of the GATS*

Having determined that EPS fell within subsector (d) of China's Schedule, and having found that the various legal instruments cited by the United States gave rise to all of the requirements identified by the United States *except* a monopoly for CUP on domestic transactions denominated and paid in RMB, the panel then examined whether those measures were inconsistent with China's obligations under the market access provisions of Article XVI of the GATS, which provides in relevant part as follows:

- 1 With respect to market access through the modes of supply identified in Article I, each Member shall accord services and service suppliers of any other Member treatment no less favourable than that provided for under the terms, limitations and conditions agreed and specified in its Schedule.
- 2 In sectors where market-access commitments are undertaken, the measures which a Member shall not maintain or adopt either on the basis of a regional subdivision

<sup>40</sup> Panel Report, para. 7.481.

<sup>41</sup> Panel Report, para. 7.505.

<sup>42</sup> See Dispute Settlement Body, Minutes of Meeting Held on 31 August 2012, WT/DSB/M/321, para. 89.

or on the basis of its entire territory, unless otherwise specified in its Schedule, are defined as:

- (a) limitations on the number of service suppliers whether in the form of numerical quotas, monopolies, exclusive service suppliers or the requirements of an economic needs test.

Article XVI:1 imposes a general requirement that Members must provide market access on terms no less favourable than provided for in its Schedule. However, Article XVI:2 goes further, and provides that in sectors in which any market access commitments are made, Members may not maintain any of six different types of measures that are considered to be antithetical to market access. Article XVI:2(a) defines one of these prohibited measures, the type of restriction alleged by the United States to exist in this case—an effective monopoly (exclusive) supplier of EPS.

Following the test established by the Appellate Body in *US–Gambling*, the panel began by considering whether China had made commitments under modes 1 and 3 with respect to payment card services. It noted that with respect to mode 1, China had inscribed in the market access column of its Schedule for subsector (d) the following notation:

Unbound except for the following:

- Provision and transfer of financial information, and financial data processing and related software by suppliers of other financial services;
- Advisory, intermediation and other auxiliary financial services on all activities listed in subparagraphs (a) through (k), including credit reference and analysis, investment and portfolio research and advice, advice on acquisitions and on corporate restructuring and strategy.

In the panel's view, this meant that China had made no market access commitments for subsector (d), except to the extent the services are covered by China's specific commitment cited immediately above. Thus, the panel had to consider, again using the rules contained in Article 31 of the Vienna Convention, whether the services within these phrases included, as the United States argued, elements of the 'payment and money transmission services' covered by subsector (d). Applying the Vienna Convention analysis, the panel concluded that the above-quoted entry in China's Schedule did not result in a market access commitment under mode 1 for the services in subsector (d), i.e., all payment and money transmission services. Accordingly, the panel rejected the United States' claim under Article XVI with respect to mode 1.

The panel then turned to the United States' claim that China had violated its market access commitments under mode 3 with respect to EPS. The panel noted that China's Schedule contained a lengthy note on the limitations on market access column with respect to mode 3. The full notation, which is set out in Annex G of the Panel Report, imposed short-term geographic limits within China on market

access for local currency business and also imposed short-term limits on which clients may be served. China argued that its notation meant that its mode 3 commitments were limited to foreign financial institutions (FFIs) and, rather than expiring at the end of the time limits (maximum five years) in the notation, they became effective on that date.

Once again applying a Vienna Convention analysis, the panel concluded that FFIs may include providers of EPS and that with respect to those services covered by subsector (d) and provided by FFIs of other WTO Members, China had made a commitment on market access covering mode 3. However, the panel viewed that commitment as limited with regard to the qualifications that FFIs must meet to engage in local currency business. In the panel's view, therefore, China's commitment was such that 'China is obligated to give EPS suppliers of other WTO Members access to its market, through commercial presence, so that they may engage in local currency business in China, subject to such suppliers meeting the aforementioned qualifications requirement.'<sup>43</sup>

Reviewing the measures at issue, the panel found that the issuer, terminal equipment, and acquirer requirements were not inconsistent with Article XVI:2 of the GATS because, based on its review of the evidence, the panel was unable to conclude that these requirements imposed a limitation on the number of EPS suppliers in China in the form of a monopoly or exclusive service supplier.<sup>44</sup>

With respect to the requirements regarding Hong Kong/Macao cards and transactions, however, the panel found that these measures were inconsistent with Article XVI:2 because they imposed a limitation on the number of service suppliers in the form of a monopoly within the meaning of Article XVI:2(a) of the GATS for the supply of EPS for RMB bank card transactions that involved either an RMB bank card issued in China and used in Hong Kong or Macao, or a RMB bank card issued in Hong Kong or Macao that is used in China in a RMB-denominated transaction. The panel noted that this limitation on the number of suppliers was imposed even in respect of EPS suppliers of other WTO Members that meet the qualification requirements specified in the notation in market access column for mode 3. The panel concluded that because China had not 'otherwise specified in its Schedule' that it may maintain such a limitation, the Hong Kong/Macao requirements imposed by China were inconsistent with Article XVI:2(a) of the GATS.

The panel's finding that the requirements at issue, other than the Hong Kong/Macao requirements, did not give rise to a monopoly or an exclusive service supplier was key to the panel's findings on the United States' market access claims under Article XVI:2(a). It is therefore worth reviewing both the relevant provisions of the GATS and the panel's analysis regarding the meaning of the terms 'monopoly' and 'exclusive service supplier'. As the panel noted, sub-paragraph (h) of

43 Panel Report, para. 7.575.

44 Panel Report, para. 7.605.

Article XXVIII, the definitional article of the GATS, defines ‘monopoly supplier of a service’ as ‘any person, public or private, which in the relevant market of the territory of a Member is authorized or established formally or in effect by that Member as the sole supplier of that service’. While Article XVIII does not provide any definition of an ‘exclusive service supplier’, the panel noted that Article VIII:5 states that: ‘The provisions of this Article shall *also* apply to cases of exclusive service suppliers, where a Member, formally or in effect, (a) authorizes or establishes a small number of service suppliers and (b) substantially prevents competition among those suppliers in its territory.’<sup>45</sup>

The panel drew a distinction between the meaning of the two terms and concluded that:

We consider that a monopoly supplier is a sole supplier authorized or established formally or in effect by a Member, whereas an exclusive service supplier is one of a small number of suppliers in a situation where a Member authorizes or establishes a small number of service suppliers, either formally or in effect, and that Member substantially prevents competition among those suppliers.<sup>46</sup>

Relying on the Report of the Appellate Body in *US–Gambling*, the panel concluded that whether a measure is in the form of a monopoly or exclusive service supplier ‘turns notably on whether it is “numerical” or “quantitative” in nature’.<sup>47</sup> Accordingly, the panel took the view that its analysis of the measures at issue must focus:

not on whether they formally or explicitly institute a monopoly or an exclusive service supplier, but on whether they constitute a limitation that is numerical and quantitative in nature. More particularly, we must examine whether they are of such a nature that they limit to one, or a small number, the number of authorized EPS suppliers in China.<sup>48</sup>

The panel recalled that it had found that, apart from the Hong Kong/Macao requirements, China’s requirements did not impose a numerical or quantitative requirement, for the following reasons:

- With respect to the issuer requirements: ‘none of the legal instruments reflecting these requirements indicates that issuers who are members of CUP may not join other networks in China (with the result that the bank cards issued work over those other networks), or that bank cards that meet CUP’s uniform business specifications and technical standards must not, or cannot, simultaneously meet those of other networks’.<sup>49</sup>

45 Panel Report, para. 7.585.

46 Panel Report, para. 7.587.

47 Panel Report, para. 7.592.

48 Panel Report, para. 7.593.

49 Panel Report, para. 7.597.

- With respect to the terminal requirements: ‘none of the legal instruments reflecting these requirements indicates that terminal equipment that must be capable of accepting bank cards bearing the *Yin Lian*/UnionPay logo could not also be capable of accepting, at the same time, bank cards bearing the logo of different EPS suppliers. Hence, we saw no basis to conclude that the terminal equipment requirements would prevent the acceptance of bank cards that would be capable of being processed over an inter-bank network in China other than that of CUP.’<sup>50</sup>
- With respect to the acquirer requirements: ‘none of the legal instruments reflecting these requirements indicates that acquirers may not also accept bank cards that would be capable of being processed over an inter-bank network in China other than that of CUP’.<sup>51</sup>

Especially in the light of the United States’ statements regarding the opacity of the Chinese measures, this raises the issue of the evidentiary standard required of the United States to establish that the measures at issue in effect gave rise to a monopoly or exclusive supplier situation. In this respect, the panel concluded as follows:

in the absence of specific legal provisions designating a company as the single supplier in a market, the United States in our view needs to provide evidence to sustain the assertion that the instruments produce economic effects that are so significant that they preclude other EPS suppliers from operating in the market. In the present case, we have no evidence, e.g. economic analyses of profitability, price–cost margins, or demand elasticity, including in comparison with other markets, that would allow us to assess whether indeed the instruments at issue make it economically unviable for other EPS suppliers to establish themselves and operate in China . . . Additional information on the conduct of CUP (e.g. price discrimination or evidence that CUP charges different customers different prices for the same service) could have assisted us in our analysis, but no such information was submitted. We are aware that relevant data may be difficult to obtain. However, given the lack of concrete evidence, we are unable to conclude that CUP is the sole supplier.<sup>52</sup>

<sup>50</sup> Panel Report, para. 7.598.

<sup>51</sup> Panel Report, para. 7.599.

<sup>52</sup> Panel Report, para. 7.504. Why evidence regarding the conduct of CUP, such as price discrimination, would be relevant in determining whether CUP was a *de facto* monopoly or exclusive supplier is unclear. Firms operating in a competitive market will often have incentives and the ability to price discriminate, e.g., by providing differentiated versions of their products, giving discounts, etc. What matters here is whether the market is contestable – i.e., whether a potential entrant assesses the market to be potentially profitable taking into account setup costs, and, if so, whether it is prevented from entering as a result of government policy. As discussed below, it may be that the EPS market simply is not profitable enough to induce new entry.

The panel's reference to the kind of evidence necessary suggests that even in cases not involving the 'opacity', in the United States' words, of the defending Member's measures, it may be very difficult to establish that measures have the *de facto* effect of imposing a limitation in the form of a monopoly or exclusive supplier within the meaning of Article XVI:2(a). The panel suggested that the United States had failed to provide evidence that would enable it to determine 'whether indeed the instruments at issue make it economically unviable for other EPS suppliers to establish themselves and operate in China'. However, the panel appears to have given little weight to the actual evidence. The facts seem clear: CUP was the *only* EPS provider in China between 2001 and mid-2013 (the time of writing); the various requirements discussed above clearly gave CUP a very preferred status, to say the least; and no other domestic or foreign supplier appears to have made any effort to enter the market during this period. Indeed, as noted above, an effort launched *after* the dispute had been adjudicated by a joint venture between a Hong Kong-based firm and Mastercard in early 2013 to provide Renminbi-based EPS for mainland China was prohibited by the Chinese authorities.<sup>53</sup> The lack of evidence as to competition in other markets would not seem to undermine the United States' argument that CUP was *de facto* the only authorized supplier in the Chinese market.<sup>54</sup> We can only speculate as to whether this narrow (from the complainant's point of view) reading of the Article XVI:2(a) was influenced by the panel's approach to the United States' claims under the national treatment provisions of Article XVII, to which we turn next.

### 3.7 *The United States' claims under Article XVII of the GATS*

The panel next turned to the United States' claims under Article XVII of the GATS, which is headed 'National Treatment' and states that:

1. In the sectors inscribed in its Schedule, and subject to any conditions and qualifications set out therein, each Member shall accord to services and service suppliers of any other Member, in respect of all measures affecting the supply of services, treatment no less favourable than that it accords to its own like services and service suppliers.
2. A Member may meet the requirement of paragraph 1 by according to services and service suppliers of any other Member, either formally identical treatment or formally different treatment to that it accords to its own like services and service suppliers.

<sup>53</sup> This case was put before the panel by the United States as it took place in 2013 after the conclusion of the panel proceedings.

<sup>54</sup> As the panel states, the US does not appear to have put forward evidence of failed efforts, if any, by companies such as Visa and Mastercard to enter the Chinese market, such as in the press report quoted above. Arguably, the panel's requirement of such evidence could be considered as a requirement to show the *trade effects* of the challenged measures, which is not normally required under WTO law.

3. Formally identical or formally different treatment shall be considered to be less favourable if it modifies the conditions of competition in favour of services or service suppliers of the Member compared to like services or service suppliers of any other Member.

Thus, the national treatment obligation prohibits Members from providing their own service suppliers with more favourable treatment in their market than that afforded to foreign suppliers. In this case, the United States alleged that China, by means of the various measures described above, afforded more favourable treatment to CUP – a domestic supplier – than it afforded to foreign service suppliers that were excluded from the market.

Before turning to the panel's analysis of the United States' claims under Article XVII, it is worth noting that there is a substantial overlap between the substantive obligations on market access under Article XVI, discussed above, and the national treatment obligation under Article XVII. In both cases, Members are required to provide services and service suppliers of any other Member treatment no less favourable (i) in the case of market access, than is provided for in its Schedule, and (ii) in the case of national treatment, than provided to its own like service suppliers. In cases where market access is granted without limitations, therefore, the obligations under Article XVI will, in effect, be the same as the obligations under Article XVII. This illustrates the importance of the terms and conditions applied to the market access and national treatment obligations contained in the relevant columns of Members' Schedules.

Following the approach of the panel in *China–Publications and Audiovisual Products*,<sup>55</sup> the panel adopted a three-part test to assess whether the United States had successfully shown that China's measures were in breach of its national treatment obligations, requiring the United States to establish that:

- (i) China has made a commitment on national treatment in the relevant sector and mode of supply, regard being had to any conditions and qualifications, or limitations, set out in its Schedule;
- (ii) China's measures are 'measures affecting the supply of services' in the relevant sector and mode of supply; and
- (iii) China's measures accord to services or service suppliers of any other Member treatment less favourable than that China accords to its own like services and service suppliers.<sup>56</sup>

The panel began this portion of its analysis by addressing China's argument that its use of the notation 'unbound' in the market access column for mode 1 for services in subsector (d) affected the scope of China's national treatment commitment for that mode (China had inscribed 'none' for mode 1 in the national

<sup>55</sup> Appellate Body Report, *China – Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products*, WT/DS363/AB/R, 21 December 2009.

<sup>56</sup> Panel Report, para. 7.41.



treatment column). The panel referred to Article XX:1 of the GATS, governing Schedules of Commitments, which provides in relevant part that:

1. Each Member shall set out in a schedule the specific commitments it undertakes under Part III of this Agreement. With respect to sectors where such commitments are undertaken, each Schedule shall specify:
  - (a) terms, limitations and conditions on market access;
  - (b) conditions and qualifications on national treatment;

In this case, however, there seemed to be a conflict between the use of the term ‘unbound’ in the market access column and the use of the term ‘none’ in national treatment column. The panel described the problem as:

a lack of clarity about the scope of the inscriptions ‘Unbound’ and ‘None’ when applied, in China’s Schedule, to measures that conflict with both market access and national treatment obligations. In considering this more specific question, we observe that the basic scheduling rule in Article XX:1, referred to above, does not determine how a Member should inscribe a limitation in such a case. Instead, we note that a special scheduling rule in Article XX:2 aims to resolve this lack of clarity:

Measures inconsistent with both Articles XVI and XVII shall be inscribed in the column relating to Article XVI. In this case the inscription will be considered to provide a condition or qualification to Article XVII as well.<sup>57</sup>

The panel’s explanation of the meaning of Article XX:2 is worth quoting:

As Article XX:2 makes clear, a single measure can contain or give rise to two simultaneous inconsistencies: one with respect to a market access obligation, the other with respect to a national treatment obligation. To maintain or introduce such a measure, the normal rule for inscribing commitments in Article XX:1 might suggest that a Member needs to enter an explicit limitation in both the market access and national treatment columns. In such cases however, the special rule in Article XX:2 provides a simpler requirement: a Member need only make a single inscription of the measure under the market access column, which then provides an implicit limitation under national treatment.<sup>58</sup>

Accordingly, ‘In the Panel’s view, the inscription of ‘Unbound’ in the market access column of China’s Schedule has the equivalent effect of an inscription of all possible measures falling within Article XVI:2’. In effect, therefore, the panel concluded that ‘Article XX:2 establishes a certain scheduling primacy for entries in the market access column, in that a WTO Member not wishing to make any commitment under Article XVI, discriminatory or non-discriminatory, may do so by inscribing the term “Unbound” in the market access column of its schedule’.<sup>59</sup>

<sup>57</sup> Panel Report, para. 7.656.

<sup>58</sup> Panel Report, para. 7.658.

<sup>59</sup> Panel Report, para. 7.664.

The panel was at pains to emphasize that it did not intend to suggest that either of the substantive market access and national treatment obligations of Article XVI and XVII was subordinate to the other.

In these circumstances, the panel found that the Hong Kong/Macao requirements, which were a limitation on market access within the meaning of Article XVI:2, were not inconsistent with China's obligations under Article XVII:1 because the notation 'unbound' in the limitation on market access column of China's Schedule took primacy over the notation 'none' in the national treatment column.<sup>60</sup>

With respect to the issuer, acquirer, and terminal equipment requirements, however, the panel noted that it had previously found that these requirements were *not* subject to Article XVI because they did not impose any of the types of market access limitations listed in Article XVI:2 and, in particular, did not create a monopoly or exclusive service supplier within the meaning of Article XVI:2(a).<sup>61</sup> Thus, the notation 'unbound' in the market access column did not take primacy over the notation 'none' in the national treatment column with respect to those requirements. Those measures would therefore be covered by China's commitment to impose no limitations on national treatment and were therefore inconsistent with Article XVII if they constituted measures affecting the supply of EPS through mode 1.

With respect to national treatment commitments for mode 3, the panel noted that China's Schedule in the national treatment column for mode 3 read as follows:

- (3) Except for geographic restrictions and client limitations on local currency business (listed in the market access column), foreign financial institution [*sic*] may do business, without restrictions or need for case-by-case approval, with foreign invested enterprises, non-Chinese natural persons, Chinese natural persons and Chinese enterprises. Otherwise, none.<sup>62</sup>

The panel interpreted the phrase 'Otherwise, none' to mean that China had no limitations on its national treatment commitment regarding subsector (d) in mode 3 other than those contained in the paragraph quoted above, which, in any event, expired in December 2006.<sup>63</sup> The panel also concluded that the issuer, terminal equipment and acquirer requirements affected the supply of services by mode 3.<sup>64</sup>

In considering whether these requirements accorded less favourable treatment under Article XVII to suppliers of like services, the panel considered that the likeness determination should be based on the competitive relationship between the

<sup>60</sup> Panel Report, para. 7.669.

<sup>61</sup> Panel Report, para. 7.670.

<sup>62</sup> Panel Report, para. 7.671.

<sup>63</sup> Panel Report, para. 7.674.

<sup>64</sup> Panel Report, para. 7.686.

services being compared.<sup>65</sup> This is, of course, analogous to the test of likeness used in the context of national treatment of goods under the GATT 1994. The panel concluded that CUP and EPS suppliers of other Members were ‘like’ suppliers of EPS and found that these requirements resulted in less favourable treatment of EPS suppliers of other Members because:

- With respect to the issuer requirements, all cards issued by Chinese banks were capable of being processed over the CUP network, whereas EPS suppliers of other Members would have to convince issuers to join their networks<sup>66</sup>;
- With respect to the terminal equipment requirements, CUP was guaranteed access to all merchants in China that accepted credit cards, while foreign EPS suppliers had to market themselves to each POS terminal user. CUP therefore had ‘automatic and universal acceptance of its bank cards’ whereas a foreign EPS supplier would have to market itself to individual merchants and acquiring banks<sup>67</sup>; and
- With respect to the acquirer requirements, the conditions of competition were altered in favour of CUP because acquirers were required to join CUP and comply with its technical requirements. In addition, the logo requirements gave CUP a commercial advantage.<sup>68</sup>

### 3.8 *Analysis of the panel’s legal findings*

The panel’s legal findings on the United States’ key claims, as discussed above are summarized in [Table 1](#).

As a legal matter, the United States was successful in the dispute because, even though it did not prevail on most of its market access claims, it did so with respect to its national treatment claims. The resolution of the market access claims involved, as shown above, a complex analysis of China’s commitments. The resolution of the national treatment claims, on the other hand, was relatively simple, as it was clear that the challenged measures afforded more favourable treatment to CUP than to foreign service suppliers.

In practical terms, however, it is not clear that this victory will be sufficient to enable the United States to obtain whatever improved market access it sought when it initiated the dispute. As noted above, it remains to be seen how China will implement the panel’s rulings and recommendations. It will be very interesting to learn whether and how implementation of the panel’s findings on the United States’ national treatment claims under Article XVII of the GATS with respect to the issuer, terminal equipment, and acquirer requirements can address the market access claims that were the main driver of the case brought forward by the United States, and on which it lost. We return to this matter in the next section.

65 Panel Report, para. 7.702.

66 See Panel Report, para 7.714.

67 Panel Report, para. 7.723.

68 Panel Report, paras. 7.737–738.

Table 1. Summary of panel findings

	Market access commitments	National treatment commitments
<b>Mode 1</b>	No violations, because China did not undertake any commitments with respect to this mode for EPS.	Issuer, terminal, and acquirer requirements were inconsistent with Article XVII:1 because they afford less favourable treatment to EPS suppliers of other Members than to CUP. Hong Kong/Macao requirements are not inconsistent because China had no commitment.
<b>Mode 3</b>	Hong Kong/Macao requirements were inconsistent with Article XVI:2(a) because they impose a limitation on the number of service suppliers in the form of a monopoly. The other requirements at issue were not shown to be inconsistent with China's market access commitments.	Issuer, terminal equipment, and acquirer requirements were inconsistent with Article XVII:1 because they afford less favourable treatment to EPS suppliers of other Members than to CUP. Panel exercised judicial economy with respect to the Hong Kong/Macao requirements.

In terms of the contribution of the Panel Report to the jurisprudence, for the most part the Panel Report represents simply another iteration of how the principles of the Vienna Convention are used to interpret the provisions of the covered agreements and, in this particular context, the text of Member's Schedules of Commitments under the GATS (and, indeed, the GATT 1994). In this respect, the Panel Report will give guidance to negotiators and lawyers in interpreting Schedules, particularly where there is confusion or conflict between commitments made with respect to market access and national treatment (although even here, China was able to describe this as a 'straightforward reading of Article XX:2 of the GATS' in its statement at the meeting of the DSB at which the Panel Report was adopted). Moreover, the fact that the Panel Report was not appealed suggests that the parties were generally not unhappy with the panel's approach to the task of interpreting China's Schedule.

The Panel Report is also significant in that the panel imposed a difficult standard of proof on a complainant seeking to establish that measures that do not impose a *de jure* limitation in the form of a monopoly or exclusive service suppliers within the meaning of Article XVI:2(a) nevertheless have the effect of doing so in practice. As we have seen, the panel faulted the lack of evidence provided by the United States on this issue. However, the panel's focus on the *numerical* or *quantitative* nature of the limitation that must be shown suggests that it will be difficult ever to establish that a *de facto* situation of exclusivity constitutes a limitation in the form of a monopoly or exclusive service supplier within the meaning of Article XVI:2(a) of the GATS. In this context, there is a contrast to be drawn between the panel's focus on a numerical limitation and the interpretation of the term 'quantitative' recently given by the Appellate Body in the context of Article XI

of the GATT 1994 where the Appellate Body stated that the term ‘quantitative’ covered ‘those prohibitions and restrictions that have a limiting effect on the quantity or amount of a product being imported or exported’ without requiring a precise numerical restriction.<sup>69,70</sup>

#### 4 Economic dimensions and some speculations

There are a number of ways to look at this dispute from an economic perspective. One is to ask whether the policy that was pursued by China can be justified from a national economic development/public policy point of view and the implications for the design of GATS disciplines. Another is to take a more narrow ‘market access’ perspective and ask whether the panel’s reasoning conforms with what an economically based approach would conclude as to whether China’s policy towards the EPS market precluded the ability of foreign EPS providers to operate in China.

From a public policy perspective, a case can be made that the creation of CUP and the various requirements imposed by China to support the growth of CUP were in the country’s interest. In 2001, the penetration and use of payment cards in China was limited. Most merchants did not accept cards and most consumers did not have cards – transactions were mostly cash based. The formation of CUP and the various measures that were the subject of the complaint by the US encouraged entry by banks into the card business and provided users of cards with assurances that their cards would work and be accepted widely. The policies that were implemented by China can be seen as measures that addressed the type of coordination failures that need to be overcome to allow the formation of a two-sided market that is associated with large network externalities that determine the benefits for both users and merchants. The EPS market is a pre-eminent example of a two-sided market, and action by the government to overcome the coordination problems involved in setting up a national retail payments system would appear to be justifiable from a social welfare perspective.

Thus, the measures put in place by China may be an example of an effective ‘industrial policy’. The EPS market differs from a ‘regular’ industry in that there are public good dimensions and positive network externalities that do not arise in the classic infant industry case. A relevant policy question then is whether the GATS

<sup>69</sup> See Appellate Body Report, *China – Measures Related to the Exportation of Various Raw Materials*, WT/DS394/AB/R; WT/DS395/AB/R; WT/DS398/AB/R, 30 January 2012, para. 320.

<sup>70</sup> One conference participant suggested that the United States should have considered making claims under Article VI of the GATS, which provides, *inter alia*, that in sectors where specific commitments are made, Members shall ensure that ‘all measures of general application affecting trade in services are administered in a reasonable, objective and impartial manner’. In *US–Gambling*, however, the panel suggested that Articles XVI and VI of the GATS are mutually exclusive. Panel Report, *US–Gambling*, para. 6.308. If so, the United States in this case would undoubtedly have preferred to push its claims under the more ‘substantive’ Article XVI, particularly with China’s implementation of any adverse finding in mind.

inappropriately constrains the ability of a government to put in place measures that support the growth of nationally welfare-enhancing network industries of this type.<sup>71</sup> This was not at issue in the dispute but the case illustrates the issue of whether governments are permitted under the GATS to intervene in services markets on public welfare grounds. The GATS does not have provisions dealing with infant industry protection, i.e., an analogue to Article XVIII GATT (Governmental Assistance to Economic Development). It only has a general exceptions provision (Article XIV) that focuses on policy space for regulation to protect human health, safety, privacy, etc. and not on policy that is aimed at the provision of economic public goods. The reason for the absence of an analogue to Art. XVIII of the GATT is that the GATS allows governments to choose whether to schedule specific commitments on a sector/mode basis, thus permitting 'industrial policy' type measures and/or specific services sectors to be excluded if a government desires to do so when it makes market access or national treatment commitments. This dispute illustrates that governments should not make full commitments on market access and national treatment if they wish to pursue policies that result in a sole supplier of a certain type of service as was the case with CUP.

This does not mean that a *de facto* monopoly is necessarily in China's longer-term interest – most probably it is not. There is no agreement in the economic literature on what constitutes an optimal EPS system in terms of pricing and fee structure and regulatory framework. The one thing there does seem to be broad agreement on is that governments should not impose barriers to entry in the payment market, as this will reduce the prospects for innovation and adoption of new technologies (Bolt, 2012). In this respect therefore, the panel came to the right conclusion insofar as we interpret the outcome as one that seeks to remove barriers to entry confronting foreign card companies.

The narrow textual approach taken by the panel to interpret the GATS market access provision – insisting on proof of the existence of explicit (formal) quantitative or numerical limitations on foreign entry – appears to preclude a finding under Article XVI:2 against a Member with a *de facto* monopoly or exclusive supplier and where that market structure is the result of government action. It might be argued that this is simply a consequence of the way Article XVI:2 is drafted, but given the mention of exclusive suppliers and monopolies in Article XVI and the requirement in Article VIII that exclusive suppliers must not undercut market access commitments, there certainly was scope for the panel to interpret the disciplines of Article XVI:2 a bit less narrowly or to apply a less demanding standard of proof. Indeed, from an economic perspective the decision not to rule on

<sup>71</sup> Many network industries will have less of a positive social welfare impact than does a national EPS system – e.g., the video game industry, a classic example of a two-sided market, where game developers are dependent on consumers choosing a given game system (platform) and consumers incentive to use a given platform is a function of the extent to which games are developed for it. See Rysman (2009).

market access grounds but instead to find against China on national treatment grounds muddies the waters. This is because it is not clear that Chinese policy in fact is discriminatory in the sense of treating potential Chinese entrants differently from potential foreign EPS providers.<sup>72</sup> To re-iterate, CUP was *de facto* the sole supplier of Renminbi-denominated electronic payment services in China. Insofar as market access is effectively blocked for *both* foreign and other domestic firms, it is unclear what the national treatment finding will/can do to address the matter. As noted above, at the time of writing, it is not clear how China will implement the panel's ruling.

The panel's reasoning summarized in Table 1 makes clear that, as explained above, the legal standard governing the national treatment analysis requires, in this case, a comparison between the treatment given to CUP and that given to foreign firms under the challenged measures (which established CUP's privileged position). This ignores the question of how other domestic firms would be treated relative to foreign ones. Implicitly, the presumption seems to be that 'CUP treatment' would also be accorded to any other Chinese entrant for which there is no evidence one way or the other given that *de facto* CUP was the sole supplier.

The facts are that no entry occurred in the period covered by the dispute and the perception of market participants was that Renminbi-denominated EPS were reserved for CUP. This view was essentially confirmed by the action taken against EpayLinks in June 2013 that was mentioned above. The absence of entry by Chinese firms suggests that potential Chinese entrants and foreign EPS providers faced an equally unlevel playing field. It appears that potential Chinese entrants would not benefit from more favourable treatment than foreign entrants – no specific examples of any such discrimination were identified by the panel. Effectively, the findings on national treatment were based on the existence of a sole Chinese supplier (CUP). From an economic perspective, if there is no difference in the measures that apply to potential Chinese providers and foreign suppliers in a situation where there is just one sole supplier that has this position because of government policy, the incentive structure confronting all potential entrants is the same, no matter what their nationality. In that sense, there is no discrimination. The panel's argument is that the existence of *de facto* sole supplier implies discrimination between foreign and domestic potential entrants. If China had scheduled CUP as a sole supplier, or defended the sole supplier status of CUP on the basis of regulatory considerations, it would have safeguarded its policy space. By not doing so, it opened itself up to a national treatment claim. The argument of the panel implies that any situation where there is a monopoly or exclusive supplier (s) will violate national treatment *unless* these entities/situations are scheduled as exceptions or limitations.

<sup>72</sup>The focus must be on potential entrants given that CUP was the sole supplier throughout the period – there were no other EPS providers, whether Chinese or non-Chinese.

There are no competition policy disciplines in the GATS beyond the very weak language in Article VIII, which states that monopolies and exclusive suppliers should not violate the specific commitments that a Member makes on market access or national treatment and should not abuse a dominant position. By effectively ruling that entrants into the EPS market should be allowed not to use the CUP logo and not have to comply with the CUP terminal equipment requirements, the panel is arguably engaging in competition policy, as the proposed ‘remedy’ is a prescription that is equally pertinent (applicable) to domestic potential entrants. The aim of the ruling appears to be facilitating entry generally and undercutting a source of the dominance of the *de facto* exclusive supplier.

As noted above, the panel based its rejection of the market access claims on a lack of evidence provided by the US, given that a careful reading of the relevant regulations did not explicitly state that CUP was *de jure* a monopoly provider. The absence of explicit language in the relevant statutes to the effect that entry into the EPS market was prohibited meant that the United States needed to bring ‘hard evidence’ that the EPS market was *de facto* closed. The panel imposed a high standard of proof on the United States in this regard, calling for information on price–cost margins and profitability – which will be difficult to obtain from an exclusive supplier that is not a publicly quoted company. But suppose instead that Visa, Mastercard or other companies had tried to enter the EPS market, invested in the development of their own network, but that this failed to generate a viable EPS system. Would this evidence have been helpful in demonstrating violation of market access? Not necessarily. Failure could have been due to the high setup costs and difficulty of overcoming the types of market failures and coordination problems that the government addressed through the various measures it took with respect to CUP. Indeed, *given* the existence of CUP and its market penetration over the span of a decade (supported by the various measures that were at issue in this dispute), it might simply be prohibitively costly for a new entrant to enter the market.

Reportedly, competition between acquiring banks for merchants’ business in China is vigorous. One indication of this is that the fees that are charged to merchants are low compared to other countries – on the order of 1% compared to up to 3% elsewhere. In addition, the government regulates the interchange fees that may be charged, which are also much lower than in other countries (Gleave, 2012).<sup>73</sup> In conjunction with the fact that issuers reportedly cannot charge card holders fees (again because of intense competition between banks), this pricing structure suggests there may not be much of an incentive for foreign card companies to set up parallel networks. News reports that the origin of the dispute

<sup>73</sup> In early 2013, the National Development and Reform Commission announced a series of reductions in the fees that may be charged for payment services. Service fees charged to merchants were to be reduced by between 20 and 35%, depending on the type of business, with a maximum of 0.13% for network fees.



between Visa and CUP was the behaviour of CUP *outside* China also suggest that the measures being contested by the United States may not have been a priority matter of concern to foreign financial services providers in China (McMahon, 2011).<sup>74</sup> In a 2012 survey of foreign banks operating in China, the CUP monopoly was listed last out of nine specific regulatory issues that negatively affected participation by foreign financial services providers in China (PWC, 2012).

Whatever the case may be, the explosive growth of CUP suggests that the measures requiring the use of – and compatibility with – CUP is an example of an effective ‘market development policy’ that led to the emergence not just of a dominant domestic service supplier but a new global player. As mentioned, the trigger for the case seems to have been that CUP was starting to eat into the core market of the major card companies – particularly the market leader, Visa. The rapid internationalization of CUP not only helps to explain why the case was launched when it was, but perhaps is also a factor as to why it was not appealed: CUP can clearly stand more competition; Chinese consumers and merchants would benefit from new entrants; and CUP is likely to want to avoid its growth abroad being foreclosed by actions that are argued to be justified because its domestic market is closed to competition.<sup>75</sup>

## References

- Anderlini, J. (2010), ‘Visa Blocked in China after UnionPay dispute’, *Financial Times*, 16 September, <http://www.ft.com/intl/cms/s/0/890f6152-c19d-11df-8e03-00144feab49a.html#axzz2UW428RQY>.
- Bank for International Settlements (2003), ‘Policy Issues for Central Banks in Retail Payments’, Committee on Payment and Settlement Systems Publication No. 52.
- Bolt, W. (2012), ‘Retail Payment Systems: Competition, Innovation, and Implications’, Working Paper No. 362, De Nederlandsche Bank.
- Crosby, D. (2007), ‘Banking on China’s WTO Commitments: “Same Bed, Different Dreams” in China’s Financial Services Sector’, *Journal of International Economic Law*, 11(1): 75–105.
- Gleave, S. (2009), ‘Focus on China’, in KPMG, *Card Payments in Asia-Pacific: The State of the Nations*. [http://www.kpmg.de/docs/Payments\\_in\\_Asia\\_Pacific.pdf](http://www.kpmg.de/docs/Payments_in_Asia_Pacific.pdf).
- Gowrisankaran, G. and J. Stavins (2004), ‘Network Externalities and Technology Adoption: Lessons from Electronic Payments’, *RAND Journal of Economics*, 35(2): 260–276.
- Hunt, R. (2003), ‘An Introduction to the Economics of Payment Card Networks’, *Review of Network Economics*, 2(2): 80–96.
- Johnson, Andrew (2013), ‘China’s UnionPay Payment Network Launches Its First Card Issued in the US’, *Dow Jones Newswires*, 30 April, <http://www.foxbusiness.com/news/2013/04/29/china--unionpay-payment-network-launches-its-first-card-issued-in-us/>.
- Kempainen, K. (2003), ‘Competition and Regulation in European Retail Payment Systems’, Bank of Finland Discussion Paper 16.

<sup>74</sup> The only US firm that reportedly actively supported bringing the case was Visa, which can be explained by the bilateral dispute between the two companies.

<sup>75</sup> In April 2013, CUP announced its first card for the US market, co-branded with US-based Bancorp Bank, the largest issuer of prepaid bank cards in the US. The card will allow customers to make payments in US dollars or local currency, including in RMB in China (Johnson, 2013).

- McMahon, D. (2011), 'US Card Companies Shrug at China's Monopoly', *Wall Street Journal*, 2 March, <http://online.wsj.com/article/SB10001424052748703749504576172484098156162.html>.
- PricewaterhouseCoopers (PWC) (2012), *Foreign Banks in China*, [http://www.pwc.be/en\\_BE/be/publications/2012/foreign-banks-china-jul2012.pdf](http://www.pwc.be/en_BE/be/publications/2012/foreign-banks-china-jul2012.pdf).
- Rabinovitch, S. and J. Anderlini (2013), 'China Blocks MasterCard Processing Renminbi Transactions', *Financial Times*, 2 June, <http://www.ft.com/intl/cms/s/0/ce3973f4-cb6c-11e2-8ff3-00144feab7de.html#axzz2bJljFbOV>.
- Rysman, M. (2009), 'The Economics of Two-Sided Markets', *Journal of Economic Perspectives*, 23(3): 125–43.
- Wu, Z. (2012), 'China's UnionPay Vies With Visa for Global Card Dominance', *Bloomberg*, 12 December, <http://www.bloomberg.com/news/2012-12-11/china-s-unionpay-vies-with-visa-for-global-card-dominance.html>
- Xiangyang, T. (2010), 'Visa Takes On China UnionPay', *Economic Observer News*, 3 June, <http://www.eeo.com.cn/ens/homepage/briefs/2010/06/03/171735.shtml>.