



Does Going Digital Make Remittances Cheaper? Evidence from the Kuwait–India corridor

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Abstract

Digital channels are widely expected to lower the cost of sending money home, yet most of the evidence compares averages across very different markets. Using 5,902 quarterly price quotes from the World Bank's Remittance Prices Worldwide survey, covering the six Gulf Cooperation Council (GCC) corridors to India and Kuwait's routes to six destinations (2011–2025), this paper asks whether digital remittance services are cheaper than agent-based ones once the corridor and the provider are held fixed, and whether the Kuwait–India corridor is cheaper than comparable Gulf routes. Service-level regressions with quarter, corridor and provider fixed effects show that sending US\$200 from Kuwait costs about 0.89 percentage points less than from the other GCC states; two-thirds of the gap lies in fees and one-third in exchange-rate margins. The central result concerns the digital channel. On Kuwait's routes, digital services look about 0.4 points cheaper in raw comparisons, but the gap shrinks by three-quarters and loses significance once provider fixed effects are added: it reflects which providers go digital, not the channel itself. Across six definitions of a digital service, the same provider prices its digital and agent products almost identically. The broader lesson is that digitalization does not automatically lower prices in mature remittance markets: lower costs to serve reach senders only where providers choose, or are pushed by competition, to pass them on.

Keywords: remittances; transaction costs; digital finance; fintech; Kuwait; India; GCC

1. Introduction

India is the largest recipient of remittances in the world. According to the World Bank's World Development Indicators, personal remittances to India reached US\$150.7 billion in 2025, equal to 3.8 per cent of GDP and close to the peak share last seen in 2008. A large part of that money is earned in the Gulf. The World Bank's bilateral estimates for 2021 attribute 58 per cent of India's remittance receipts to the six member states of the Gulf Cooperation Council (GCC), and Kuwait alone accounts for about US\$6.4 billion, or 7.1 per cent of the total. Seen from Kuwait, India is by far the most important destination: the same estimates put roughly 40 per cent of all remittances leaving Kuwait on the India route, well ahead of Egypt and Pakistan.

Because these transfers are frequent and often small, what they cost matters. Every percentage point shaved off the price of a transfer is money that stays with the families who receive it. The international community has set a target, under Sustainable Development Goal 10.c, of bringing the cost of remittances below 3 per cent of the amount sent. Digital channels — services that the sender can start online or on a phone, and that pay into a bank account rather than over a counter — are usually presented as the main route to that target. The Reserve Bank of India's latest remittance survey reports that nearly three-quarters of the remittances it tracked in 2023–24 were received through digital modes (RBI, 2025).

The evidence behind the claim that digital means cheaper is, however, mostly descriptive. Global reports compare the average price of digital and non-digital services across hundreds of corridors that differ in competition, regulation, currency and scale. A digital service may look cheap simply because it is offered in a cheap corridor, or because the providers who offer digital products also happen to price everything low. Separating the digital channel from the corridor and from the provider is what this paper tries to do.

The setting is well suited to that task. The Kuwait–India corridor is large, mature and served by a stable group of exchange houses and transfer operators, and the World Bank has surveyed it every quarter since late 2015. The five other GCC routes to India provide natural comparison corridors: they send money to the same country, in the same currency, under broadly similar labor-migration systems. Kuwait's own routes

to Egypt, Pakistan, Bangladesh, the Philippines and Jordan provide a second comparison, holding the sending market fixed.

The paper makes three contributions. First, it documents that Kuwait–India is consistently the cheapest GCC route to India and measures the size of that advantage with service-level data rather than corridor averages. Second, it splits the price into its fee and exchange-rate parts, which shows where the advantage comes from. Third, and most important for the digital-finance debate, it shows that once the provider is held fixed, the digital version of a service is not cheaper than the agent version, whichever of six definitions of 'digital' is used. The digital discount that appears in raw comparisons is a provider effect, not a channel effect. Earlier studies of remittance prices compare corridor or channel averages (e.g. Beck and Martínez Pería, 2011); by exploiting the fact that many providers offer both digital and agent versions of the same transfer, this paper separates the effect of the channel from the provider's overall pricing strategy.

These findings matter beyond the Gulf. Policy discussions of remittance costs, including the SDG agenda, tend to treat digitalization as the lever that brings prices down. The evidence here shows that in a mature, well-served corridor, the digital channel itself does not deliver a lower price; any saving depends on whether providers pass it on. That distinction applies wherever digital services are being added to established cash-based remittance markets, from the Gulf to Europe and North America.

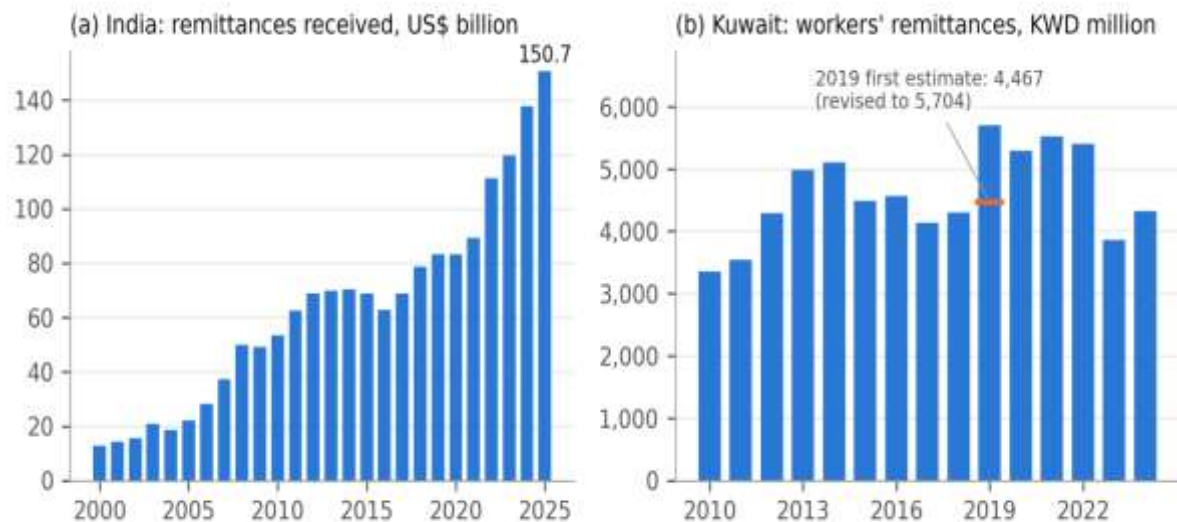
The rest of the paper is organized as follows. Section 2 describes the corridor, reviews the literature and sets out a simple conceptual framework. Section 3 introduces the data. Section 4 sets out the empirical approach, Section 5 presents the results and robustness checks, Section 6 discusses what they mean for policy, and Section 7 concludes.

2. Background and related literature

2.1 The Kuwait–India corridor

Kuwait's economy relies heavily on foreign labor, and Indian nationals form one of the largest expatriate communities in the country. Workers' remittances recorded in Kuwait's balance of payments grew from KWD 3.36 billion in 2010 to a little over KWD 5.1 billion in 2014, eased to around KWD 4.1–4.6 billion between 2015 and 2018, and then stood between KWD 5.3 and 5.7 billion from 2019 to 2022 (Central Bank of Kuwait, Quarterly Statistical Bulletin, various issues). They fell sharply to KWD 3.87 billion in 2023 before recovering to KWD 4.32 billion in 2024 (Fig. 1b).

Two features of this series deserve care. The first is a statistical revision. The Central Bank's first estimate for 2019 was KWD 4.47 billion; later issues revised it to KWD 5.70 billion, an upward change of 28 per cent, while the 2018 figure was left unchanged. The step between 2018 and 2019 is therefore partly a matter of measurement, and any analysis of Kuwaiti remittance volumes across that year should allow for it. The second is that neither India nor Kuwait publishes the bilateral flow between them. The World Bank's bilateral matrix estimates it from migrant stocks and incomes (Ratha and Shaw, 2007), while the RBI survey reports the share of each source country in bank-reported inflows. The two measures disagree: the World Bank puts Kuwait at 7.1 per cent of India's receipts in 2021, while the RBI survey reports 3.9 per cent for 2023–24, down from 6.5 per cent in 2016–17. Part of the gap reflects different years and part reflects different methods, but together they point to a corridor that is large in absolute terms and losing share within India's total.



Sources: World Bank WDI (BX.TRF.PWKR.CD.DT); Central Bank of Kuwait, Quarterly Statistical Bulletin.

Figure. 1. Remittance volumes. (a) Personal remittances received by India, US\$ billion, 2000–2025. (b) Workers' remittances paid by Kuwait, KWD million, 2010–2024; the orange mark shows the Central Bank of Kuwait's first estimate for 2019 before revision.

2.2 What drives the price of a remittance

The cost of a transfer has two parts: an explicit fee and a hidden margin built into the exchange rate the provider applies. Beck and Martínez Pería (2011) study prices across 119 corridors and find that they are lower where more migrants use the corridor, where the market is more competitive and where banks play a smaller role. Their work also shows that the exchange-rate margin can be as large as the fee, which makes it important to look at both parts separately.

Prices matter because senders respond to them. Freund and Spatafora (2008) show that higher transaction costs push remittances into informal channels, and Gibson, McKenzie and Rohorua (2006) estimate that lower costs would raise the amounts sent by Tongan migrants. Yang (2011) and Rapoport and Docquier (2006) survey the wider literature on why migrants send money and how the flows affect households at home. For the Gulf specifically, Naufal and Termos (2009) show that GCC remittance outflows move with oil prices, a reminder that the volume side of the corridor is driven largely by forces outside the payment industry.

Evidence on digital channels comes mainly from mobile money. Jack and Suri (2014) show that M-Pesa lowered the cost of sending money within Kenya and changed how households share risk. Kosse and Vermeulen (2014) find that migrants' choice of remittance channel follows their general payment habits: people who already use bank accounts and cards are more likely to send digitally. That finding has a direct implication for price comparisons. If digital users differ from cash users, and the providers serving them differ too, then a raw comparison of digital and cash prices mixes the effect of the channel with the effect of who offers it. This paper addresses that problem by comparing prices within the same provider.

2.3 Conceptual framework

Fig. 2 sets out the mechanism the paper tests. A digital channel can lower the cost of serving a customer: there is no counter to staff, no cash to count, move and insure, and the sender's identity and funds can be checked electronically. Whether those savings reach the sender depends on a second link, pass-through. A provider that competes hard for the same customers has a reason to pass cost savings on in its prices. A provider with some market power, or one that prefers a single price list across all its channels, may keep the savings as margin or use them to support its branch network. The framework therefore predicts a digital discount only where both links hold.

A third element sits upstream. Providers decide which channels to offer, and that decision reflects their strategy, their investment in technology and the customers they already serve. This selection is the reason raw comparisons of digital and agent prices can mislead, and it is why the analysis below compares digital and agent services offered by the same provider.

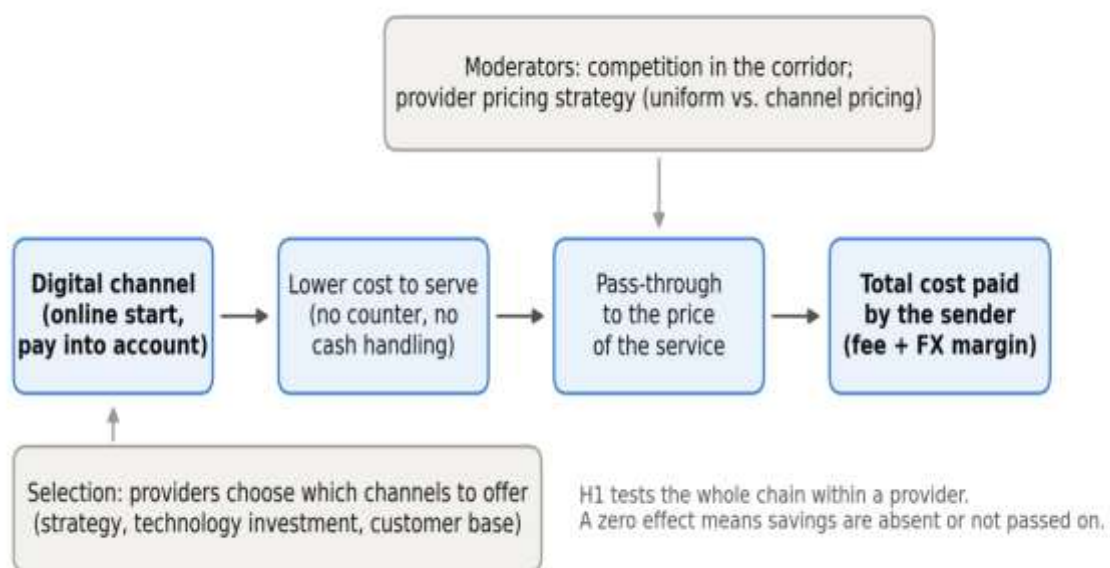


Figure. 2. Conceptual framework: how a digital channel could lower the price of a remittance, and what can stop it.

2.4 Hypotheses

Two hypotheses follow. H1: digital remittance services are cheaper than otherwise similar agent-based services. Under the framework, H1 fails if digital channels do not lower the cost to serve, or if the savings are not passed through. H2: the Kuwait–India corridor is cheaper than the other GCC corridors to India, after allowing for differences in the mix of services on offer.

3. Data

3.1 Remittance prices

The main data come from the World Bank's Remittance Prices Worldwide (RPW) database, file release covering 2011 Q1 to 2025 Q1. Each quarter, researchers record the price that each major provider in a corridor charges to send the equivalent of US\$200 and US\$500, together with the fee, the exchange rate applied, the exchange-rate margin over the interbank rate, the speed of delivery, the type of provider, how the sender can pay and access the service, and how the receiver can collect the money. The unit of observation is therefore a service offered by a provider in a corridor in a quarter.

I use two samples. The GCC–India sample contains every service surveyed from the six GCC states to India: 3,397 observations from 58 providers across 53 quarters. Coverage starts in 2011 for the United Arab Emirates, Saudi Arabia and Qatar, in 2015 Q4 for Kuwait and in 2016 Q2 for Bahrain and Oman. The Kuwait sample contains every service surveyed from Kuwait to its six surveyed destinations (India, Egypt, Pakistan, Bangladesh, the Philippines and Jordan): 3,114 observations from 18 providers across 38 quarters from 2015 Q4 to 2025 Q1.

The survey changed its variable definitions in 2016 Q2, replacing 'sending location' and 'product' with 'access point' and 'payment instrument'. I harmonize the earlier records by mapping branch-based sending to the 'agent' access point and online sending to the 'internet' access point. In 2022 Q4 the survey also enlarged the number of services recorded in the Kuwait–India corridor from about ten to thirty per quarter. Quarter fixed effects absorb both changes, and the robustness section tests the second one directly by dropping the later quarters.

3.2 Variables

The dependent variable is the total cost of sending US\$200, expressed as a percentage of the amount sent. It combines the fee and the exchange-rate margin. I also examine the two parts separately, and the total cost of sending US\$500. Three indicators describe the channel. Online equals one when the service can be started over the internet. Into account equals one when the receiver is paid into a bank account. Digital equals one when both hold, which is close to the World Bank's own definition of a digital remittance. Controls capture the type of provider (bank versus transfer operator), whether the money arrives within the same day, and whether the sender must pay in cash. Table 1 summarizes the samples.

'Digital remittance' has no single agreed definition, so the baseline measure is checked against five alternatives: online access alone; remote access through the internet or a mobile phone; non-cash funding (a card, a bank account, mobile money or an online payment); non-cash funding combined with payment into an account; and mobile channels (a mobile-phone access point or mobile-money funding). The survey does not identify app-based services or fintech firms as such, and it records delivery speed but not whether a transfer is instant in the technical sense, so those narrower categories cannot be separated.

Because the survey records prices and not volumes, averages in this paper are averages across services, not across money sent. A price that applies to a small online-only product counts as much as the price of the most popular counter service. I return to this point when discussing the results.

Table 1. Remittance services from GCC countries to India: summary statistics, 2011 Q1 – 2025 Q1

Sending country	First quarter	Services	Providers	Cost US\$200 (%)	Cost US\$500 (%)	FX margin (%)	Online (%)	Digital (%)
Kuwait	2015Q4	609	13	2.46	1.49	0.75	33	17
United Arab Emirates	2011Q1	900	19	3.29	2.01	0.85	14	10
Saudi Arabia	2011Q1	427	13	4.78	2.99	1.79	3	3
Qatar	2011Q1	573	12	4.69	3.21	2.19	14	10
Oman	2016Q2	353	10	3.67	1.99	0.88	3	0
Bahrain	2016Q2	535	14	2.86	1.85	1.17	13	2
All GCC	2011Q1	3,397	58	3.54	2.21	1.23	15	8

Notes: Costs are simple averages across surveyed services, in per cent of the amount sent. Online = service can be started over the internet; Digital = online and paid into a bank account. Source: World Bank, Remittance Prices Worldwide.

3.3 Volumes

Volume data are used for context rather than estimation. India's receipts come from the World Development Indicators (series BX.TRF.PWKR.CD.DT and BX.TRF.PWKR.DT.GD.ZS). Kuwait's outflows come from the balance-of-payments tables in the Central Bank of Kuwait's Quarterly Statistical Bulletin (workers' remittances, debit), cross-checked against the World Bank's series BM.TRF.PWKR.CD.DT. Dividing the World Bank's dollar figures by the Central Bank's dinar figures gives an implied exchange rate of US\$3.3–3.7 per dinar in every year from 2010 to 2024, which confirms that the two sources describe the same flows. Bilateral estimates come from the World Bank/KNOMAD matrix for 2021, and source-country shares from the RBI's sixth remittances survey (RBI, 2025).

4. Empirical approach

For service i offered by provider f in corridor c in quarter t , I estimate

$$Cost_{ifct} = \alpha + \beta \cdot Digital_{ifct} + \gamma \cdot Kuwait_c + X_{ifct}'\delta + \mu_t + \varepsilon_{ifct} \quad (1)$$

where Cost is the total cost of sending US\$200, Digital is the channel indicator (or its online and into-account components), Kuwait marks services sent from Kuwait, X holds the provider-type, speed and cash-payment controls, and μ_t are quarter fixed effects that absorb anything common to all corridors in a given quarter, such as global exchange-rate movements or changes in survey practice.

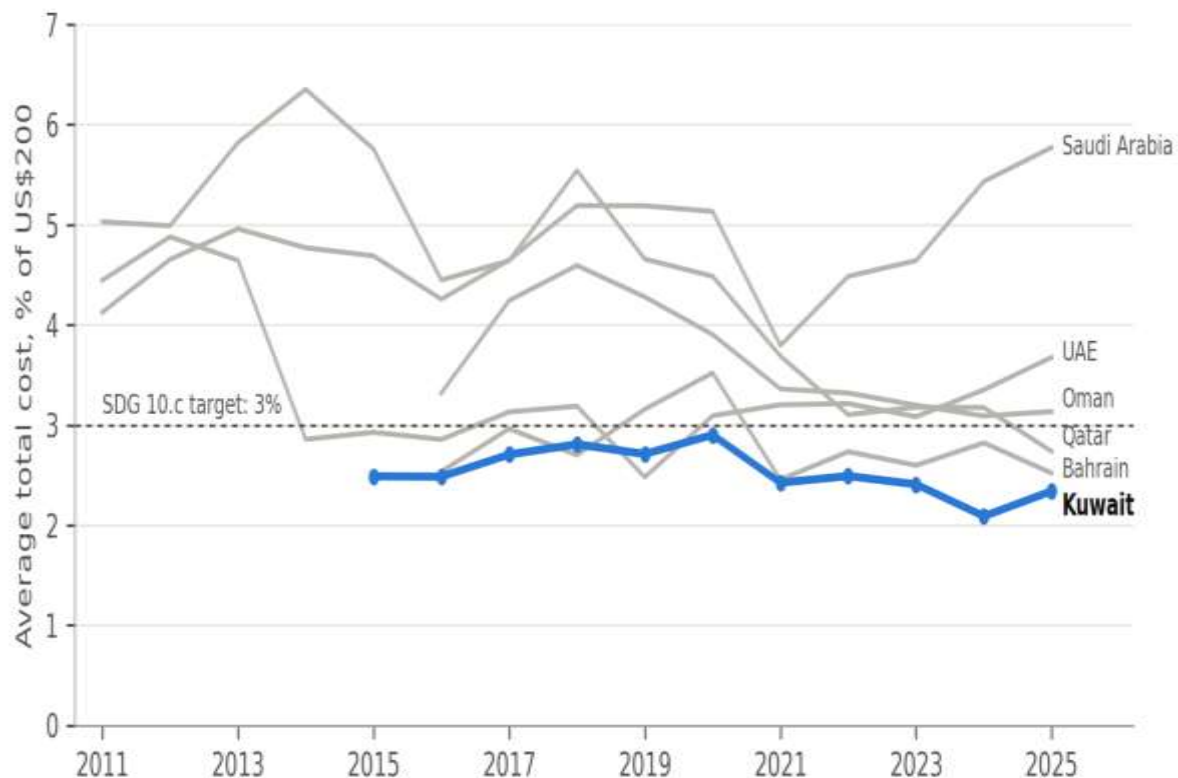
Three variations answer the two hypotheses. To test H2, I estimate Eq. (1) with quarter effects only, so that γ measures how much cheaper Kuwait is than the other GCC corridors for a service with the same characteristics. To test H1, I replace the Kuwait indicator with a full set of sending-country fixed effects, so that β compares digital and non-digital services within the same corridor. Finally, I add provider fixed effects. This is the demanding version: β is then identified only from providers who offer both digital and non-digital services, and it asks whether the same firm charges less for its digital product.

Standard errors are clustered by provider, because prices set by the same firm are likely to move together across corridors and over time (Cameron and Miller, 2015). The GCC–India sample has 58 clusters, which is comfortable. The Kuwait sample has 18, which is on the small side, so I use critical values from the t distribution with $G - 1$ degrees of freedom and interpret marginal results with caution. For the Kuwait sample, the corridor indicator becomes India, which compares Kuwait–India with Kuwait's other routes.

5. Results

5.1 Descriptive patterns

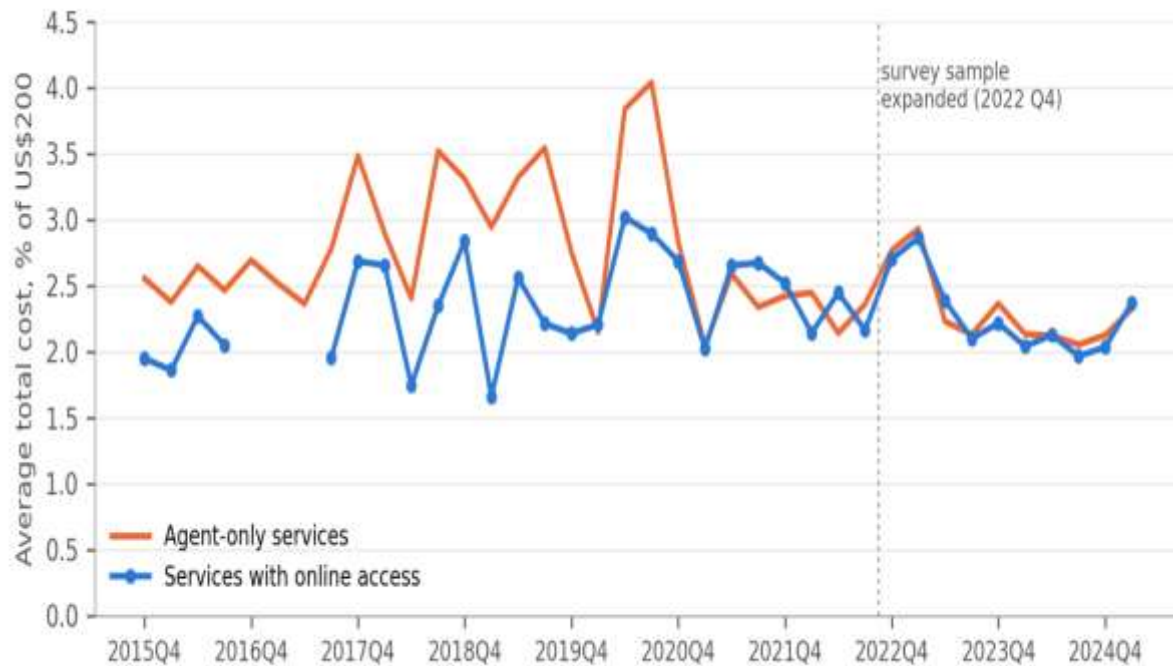
Fig. 3 shows the average cost of sending US\$200 to India from each GCC state. Kuwait is the cheapest or near-cheapest route in every year it is surveyed, at between 2.1 and 2.9 per cent, and it has stayed under the 3 per cent SDG target throughout. Saudi Arabia and Qatar started the period well above 4 per cent; Qatar has since fallen close to Kuwait, while Saudi Arabia has moved in the opposite direction and reached 5.8 per cent in 2025. Across the whole sample, the average Kuwait–India service cost 2.46 per cent, against 3.77 per cent for the other five corridors combined (Table 1).



Source: World Bank, Remittance Prices Worldwide (2011 Q1 – 2025 Q1); simple averages across surveyed services.

Figure 3. Average total cost of sending US\$200 to India, by GCC sending country, 2011–2025 (per cent of amount sent). Simple averages across services surveyed in each year.

Kuwait also stands out on the channel side. A third of the services surveyed on the Kuwait–India route can be started online, compared with 3 to 14 per cent on the other routes, and 17 per cent are fully digital. It is tempting to connect the two facts and conclude that Kuwait is cheap because it is digital. Fig. 4 suggests otherwise. In the early years, online services on the Kuwait–India route were indeed cheaper than agent-only services: 2.22 per cent against 2.82 per cent on average in 2015–2019. That gap narrowed to 0.10 points in 2020–2022 and to 0.04 points in 2023–2025. Agent prices came down to meet online prices rather than the other way round.



Source: World Bank, Remittance Prices Worldwide. Online = access point includes the Internet. Gaps = no online service surveyed.

Figure 4. Kuwait–India: average total cost of sending US\$200, services with online access versus agent-only services, 2015 Q4 – 2025 Q1. The dotted line marks the enlargement of the survey sample in 2022 Q4.

5.2 Is the Kuwait–India corridor cheaper?

Table 2 reports the regressions for the GCC–India sample. Column (1) estimates Eq. (1) with quarter fixed effects. Holding the service characteristics fixed, sending US\$200 from Kuwait costs 0.89 percentage points less than from the other GCC states (standard error 0.20, significant at the 1 per cent level). Measured against the sample mean of 3.54 per cent, that is a discount of about a quarter. H2 is supported.

Table 4 shows where the discount comes from. Kuwait's exchange-rate margin is 0.30 points lower and its fee component 0.59 points lower, so about two-thirds of the advantage lies in fees and one-third in the exchange rate. The advantage is smaller in percentage terms for larger transfers — 0.55 points on US\$500 — which is what one would expect if part of it is a lower fixed fee.

5.3 Are digital services cheaper?

Columns (2) to (5) of Table 2 turn to H1. With sending-country and quarter fixed effects, the digital indicator is 0.00 with a standard error of 0.61: digital services are priced the same as agent services in the same corridor and quarter. Splitting the indicator into its parts does not change the picture; neither online access (-0.09) nor payment into an account (0.08) moves the price. Adding provider fixed effects in column (3) tightens the estimate to -0.06 (standard error 0.16). The same firm, in other words, charges almost exactly the same for its digital and its counter product.

Column (5) allows the digital effect to differ before and after 2020. The point estimates tell the same story as Fig. 4 — a discount of 0.57 points before 2020 that disappears afterwards — but neither coefficient is precisely estimated. H1 is not supported: within this group of corridors, being digital does not by itself make a remittance cheaper.

Table 2. GCC–India corridors: Kuwait discount and digital channel

Dependent variable: total cost of sending US\$200 (%)

	(1)	(2)	(3)	(4)	(5)
Kuwait (sender)	-0.890***				
	(0.200)				
Digital	-0.029	0.000	-0.059		-0.567
	(0.639)	(0.607)	(0.161)		(0.501)
Online access				-0.089	
				(0.431)	
Paid into account				0.078	
				(0.198)	
Digital × 2020 onward					0.818
					(0.727)
Bank provider	0.758	0.313	-0.549***	0.299	0.302
	(0.799)	(0.853)	(0.175)	(0.842)	(0.853)
Same-day delivery	-0.136	0.008	-0.184	0.040	0.009
	(0.239)	(0.153)	(0.138)	(0.187)	(0.152)
Cash payment only	0.396*	0.175	0.325**	0.169	0.161
	(0.214)	(0.174)	(0.147)	(0.240)	(0.169)
Quarter fixed effects	Yes	Yes	Yes	Yes	Yes
Sending-country fixed effects	No	Yes	Yes	Yes	Yes
Provider fixed effects	No	No	Yes	No	No
Observations	3,397	3,397	3,397	3,397	3,397
Clusters (providers)	58	58	58	58	58
R ²	0.133	0.209	0.644	0.209	0.211

Notes: OLS estimates. Standard errors clustered by provider in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Sample: all services surveyed from the six GCC states to India, 2011 Q1 – 2025 Q1.

5.4 Kuwait's own corridors

Table 3 holds the sending market fixed and compares Kuwait–India with Kuwait's routes to other countries. Kuwait–India is 0.53 points cheaper than the average of Kuwait's other corridors (column 1), and the difference hardly changes when provider fixed effects are added (0.51, column 3). The ranking is not uniform: Kuwait–Pakistan averages 1.6 per cent and is cheaper still, while the routes to Bangladesh and Jordan average 3.9 and 4.5 per cent.

The digital coefficient in this sample tells an instructive story. Without provider fixed effects, digital services from Kuwait appear 0.52 points cheaper, and the estimate is statistically significant. Once provider fixed effects are included, it halves to 0.25 and is no longer significant. The apparent digital discount is largely a provider effect: the firms that offer digital products in Kuwait are the cheaper firms, and they are cheap across all their products.

The same pattern appears without any service-level controls. With quarter fixed effects only, digital services from Kuwait are 0.40 points cheaper (SE 0.13); adding destination fixed effects leaves 0.34 points (SE 0.10); adding provider fixed effects cuts the gap to 0.11 points (SE 0.09), which is no longer distinguishable from zero. About three-quarters of the raw digital discount is therefore explained by the identity of the provider.

Table 3. Kuwait's corridors: India versus other destinations

Dependent variable: total cost of sending US\$200 (%)

	(1)	(2)	(3)
India (destination)	-0.530** (0.210)		-0.508** (0.220)
Digital	-0.518** (0.192)		-0.253 (0.188)
Online access		-0.004 (0.082)	
Paid into account		-0.198 (0.114)	
Bank provider	-0.061 (0.359)	0.244 (0.204)	-0.057 (0.251)
Same-day delivery	-0.621* (0.322)	-0.018 (0.212)	-1.090*** (0.305)
Cash payment only	0.117 (0.169)	0.244* (0.134)	0.089 (0.200)
Quarter fixed effects	Yes	Yes	Yes
Destination fixed effects	No	Yes	No
Provider fixed effects	No	No	Yes
Observations	3,114	3,114	3,114
Clusters (providers)	18	18	18
R ²	0.092	0.302	0.140

Notes: OLS estimates. Standard errors clustered by provider in parentheses; with 18 clusters, p-values use the t distribution with 17 degrees of freedom. *** p<0.01, ** p<0.05, * p<0.1. Sample: all services surveyed from Kuwait to India, Egypt, Pakistan, Bangladesh, the Philippines and Jordan, 2015 Q4 – 2025 Q1.

5.5 Robustness

Table 4 collects the robustness checks. Removing the 21 observations with a reported cost below zero or above 15 per cent leaves the Kuwait coefficient at -0.89. Dropping the quarters after the survey was enlarged in 2022 Q4 gives -0.90. Restricting the sample to the period in which Kuwait is surveyed (from 2015 Q4) gives -1.01. Clustering by corridor and quarter instead of by provider shrinks the standard error to 0.09 without changing the point estimate. The digital coefficient stays close to zero and insignificant in every specification. The US\$500 results mirror those for US\$200.

Table 4. Cost components and robustness (GCC-India sample)

Dependent variable and sample as indicated

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Kuwait (sender)	-0.300***	-0.591***	-0.553***	-0.890***	-0.900***	-0.890***	-1.008***
	(0.101)	(0.153)	(0.123)	(0.181)	(0.299)	(0.086)	(0.169)
Digital	0.129	-0.158	0.025	0.004	-0.187	-0.029	0.203
	(0.122)	(0.565)	(0.313)	(0.566)	(0.622)	(0.181)	(0.603)
Dependent variable	FX margin	Fee	Cost US\$500	Cost US\$200	Cost US\$200	Cost US\$200	Cost US\$200
Sample	Full	Full	Full	Cost 0–15%	To 2022 Q3	Full	From 2015 Q4
Clustering	Provider	Provider	Provider	Provider	Provider	Corridor × quarter	Provider
Observations	3,397	3,397	3,397	3,376	2,469	3,397	2,887
Clusters	58	58	58	57	52	269	57
R ²	0.156	0.107	0.146	0.135	0.117	0.133	0.101

Notes: OLS estimates with quarter fixed effects and the controls of Table 2, column (1) (coefficients not shown). Fee = total cost minus FX margin, both for US\$200. Standard errors in parentheses; column (6) clusters by corridor and quarter (269 clusters). *** p<0.01, ** p<0.05, * p<0.1.

Table 5 repeats the within-corridor test for each alternative definition of a digital service. None of the broader definitions produces a significant discount once the corridor and quarter are held fixed; point estimates range from -0.18 to -0.09 points. With provider fixed effects, the largest of these estimates in absolute terms is for non-cash funding (-0.26, p = 0.12). The one exception is the narrow mobile category, which shows a discount of 0.97 points within provider. That estimate rests on only 56 services from three providers in Qatar and Saudi Arabia, none of them in Kuwait, so it is best read as a lead for future work rather than a finding.

The survey also reports how many providers were surveyed in each corridor and quarter. This is at best a rough proxy for market breadth, because the World Bank chooses providers to cover the bulk of each market rather than to count them, but it is the only structural measure the data offer. The Kuwait corridor averages 8.6 surveyed providers per quarter, close to the GCC mean, and adding the count as a control leaves the Kuwait discount at -0.94 (SE 0.20).

Table 5. Alternative definitions of a digital service (GCC-India sample)

Dependent variable: total cost of sending US\$200 (%)

Definition of digital	Share of services (%)	Corridor + quarter FE	SE	Adding provider FE	SE
Baseline: online and into account	8.2	0.000	(0.607)	-0.059	(0.161)
Online access only	14.7	-0.104	(0.422)	-0.083	(0.175)
Remote access (internet or mobile)	16.3	-0.183	(0.422)	-0.141	(0.166)
Non-cash funding	35.1	-0.088	(0.198)	-0.259	(0.165)
Non-cash funding and into account	23.3	-0.107	(0.263)	-0.127	(0.199)
Mobile (app or mobile money)	1.6	-0.494	(0.488)	-0.965***	(0.160)

Notes: Each row reports the coefficient on a different digital indicator from Eq. (1) with the controls of Table 2. N = 3,397; 58 provider clusters. Mobile = mobile-phone access point or mobile-money funding (56 services, three providers). *** p<0.01, ** p<0.05, * p<0.1.

6. Discussion

The two main findings fit together. The Kuwait-India corridor is cheap, and it became cheap without a price premium for digital services. The pattern is consistent with competition pulling the whole price schedule down, although competition itself is not measured here. The exchange-rate margin on the route fell from about 1.05 per cent in 2015–2019 to 0.37 per cent in 2023–2025, and agent prices converged on online

prices. In a market where counter services are already priced close to digital ones, customers gain little in price from switching channel; the gains come in speed and convenience.

This interpretation has limits that should be stated plainly. The data describe prices on offer, not the prices customers actually pay weighted by how much they send. If most money on the route already moves through the cheapest digital services, the average customer may pay less than the average service suggests. The analysis also cannot say why Kuwait is cheaper than its neighbors. Plausible candidates include the density of exchange houses serving Indian workers, the size of the Indian community relative to the market, and differences in regulation, but testing them would require data on market structure that the price survey does not contain.

A related limitation concerns how providers come to offer digital services. Channel choice is a strategic decision, not a random one. Providers that invest in online platforms may differ from others in scale, cost structure, ownership or customer base, and they may launch digital products at the moment they plan to cut prices, or when their rivals do. Provider fixed effects remove fixed differences between firms, which is why the digital coefficient moves towards zero once they are added, but they cannot remove changes in strategy that occur within a firm over time and coincide with a digital launch. The estimates are therefore best read as well-controlled associations rather than causal effects of digitalization. A cleaner test would exploit an outside shock to digital adoption, such as a rule change that allowed online sending in one corridor but not in another.

The competition explanation also remains untested. The price survey does not record transaction volumes, so market shares and concentration measures such as the Herfindahl–Hirschman index cannot be computed. The number of surveyed providers is a poor substitute, since it reflects the survey's design as much as the market. Showing whether competition drives the Kuwait discount would need volume data by provider, which central banks and exchange-house regulators hold but do not publish.

For policy, the results caution against treating digitalization as an end in itself. On routes such as Saudi Arabia–India, where prices remain well above the SDG target, the question is not only whether digital products exist but whether enough providers compete for the same customers. For Kuwait, where the SDG target has already been met, the remaining costs are mostly fixed fees; a fee structure that falls with the amount sent would help the smallest senders most. For India, the RBI's observation that most inflows already arrive digitally suggests that the next gains are more likely to come from the sending side than from the receiving side.

7. Conclusion

This paper has used service-level price data to study one of the world's largest remittance corridors. Its central result is that the digital discount seen in raw price comparisons is a provider effect: once services offered by the same provider are compared, digital and agent transfers cost almost the same. Sending money from Kuwait to India is about 0.9 percentage points cheaper than from other Gulf states, an advantage that holds across specifications and comes mostly from lower fees. Digital status, by contrast, does not lower prices once the provider is held fixed. In the Kuwait–India corridor, the price gap between online and agent services has all but disappeared.

The lesson reaches beyond the Gulf. In mature remittance markets, digitalization does not automatically lower prices. A digital channel can reduce what it costs a provider to serve a customer, but senders benefit only when providers pass that saving on. Policies aimed at cheaper remittances should therefore look at competition and pricing practice alongside the spread of digital services, not treat the second as a substitute for the first.

Future work could extend the analysis in four directions: linking price data to transaction volumes to measure what senders actually pay; adding measures of market concentration to explain why corridors differ; using an outside shock to digital adoption to identify its causal effect on prices; and following the Kuwait–India series through the Central Bank of Kuwait's quarterly releases to relate prices to volumes over time, taking care with the 2019 revision.

Data availability and use of generative AI

Data availability. All data are publicly available from the World Bank (Remittance Prices Worldwide; World Development Indicators; KNOMAD bilateral remittance estimates), the Central Bank of Kuwait (Quarterly Statistical Bulletin) and the Reserve Bank of India. The processed dataset and code are available from the author on request.

Declaration of generative AI and AI-assisted technologies in the writing process. During the preparation of this manuscript, I used AI tools for drafting and language editing, improving clarity and structure. I conceived the study, collected the data, directed and verified all analyses, interpreted the findings, checked all references, and critically reviewed and edited all AI-assisted outputs. I take full responsibility for the accuracy, integrity, and originality of the content of this article.

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