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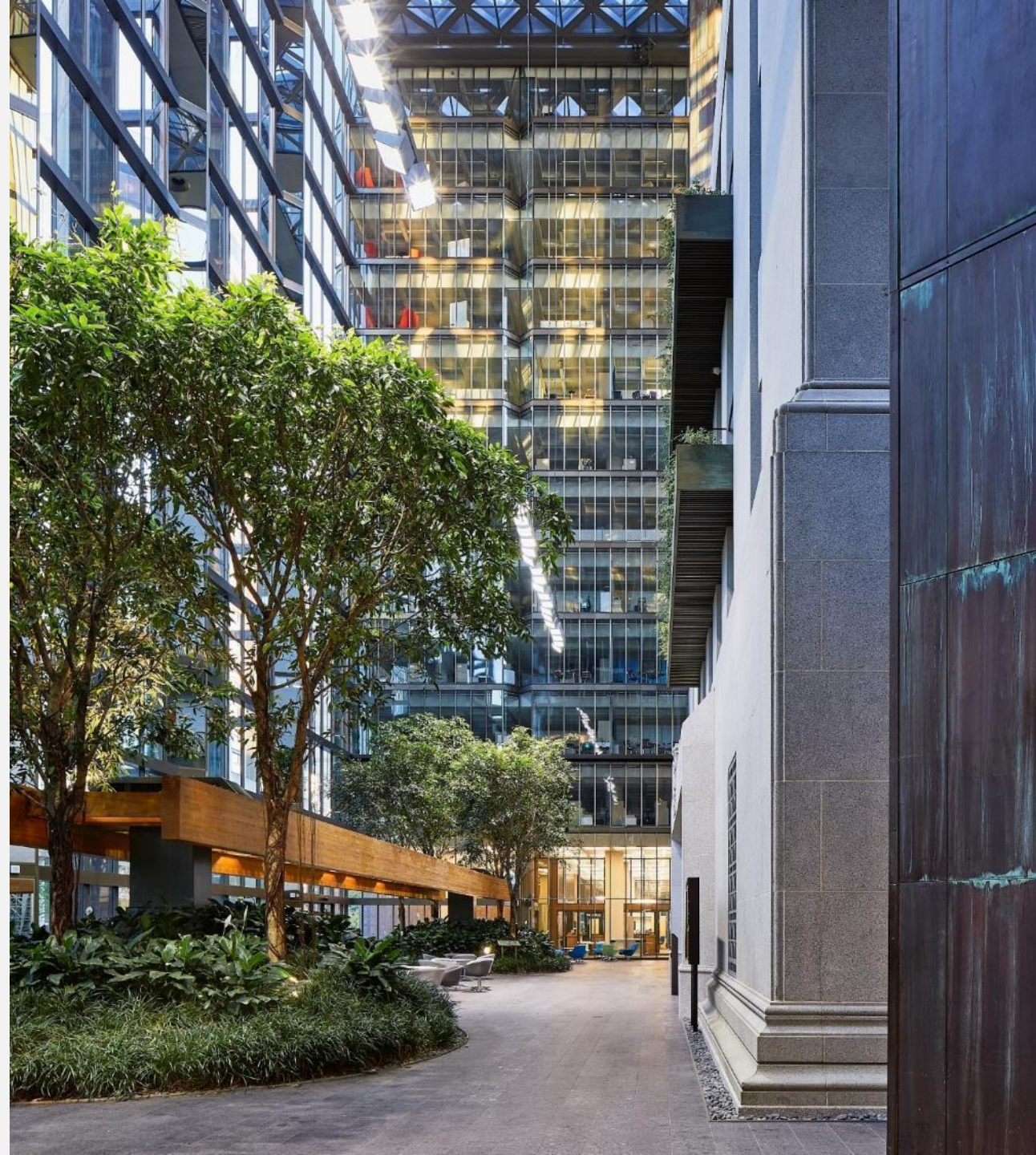
# Distributional Effects of Payment Card Pricing and Merchant Cost Pass-Through in Canada and the U.S.

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## Economics of Payments X, Suomen Pankki

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# Motivation

- In Canada and the U.S., merchants generally do not differentiate prices based on payment methods.
- Merchants **pass through** their costs of accepting payment methods to all consumers, even though credit cards are more expensive for them to accept.
- Credit card transactions are **cross-subsidized** by lower-cost debit and cash payments. Card rewards and consumer fees paid to financial institutions may also generate **cross-subsidies**.
- Because higher-income consumers tend to use credit cards more often than lower-income consumers do, these cross-subsidies may lead to **regressive distributional effects**.

# Method

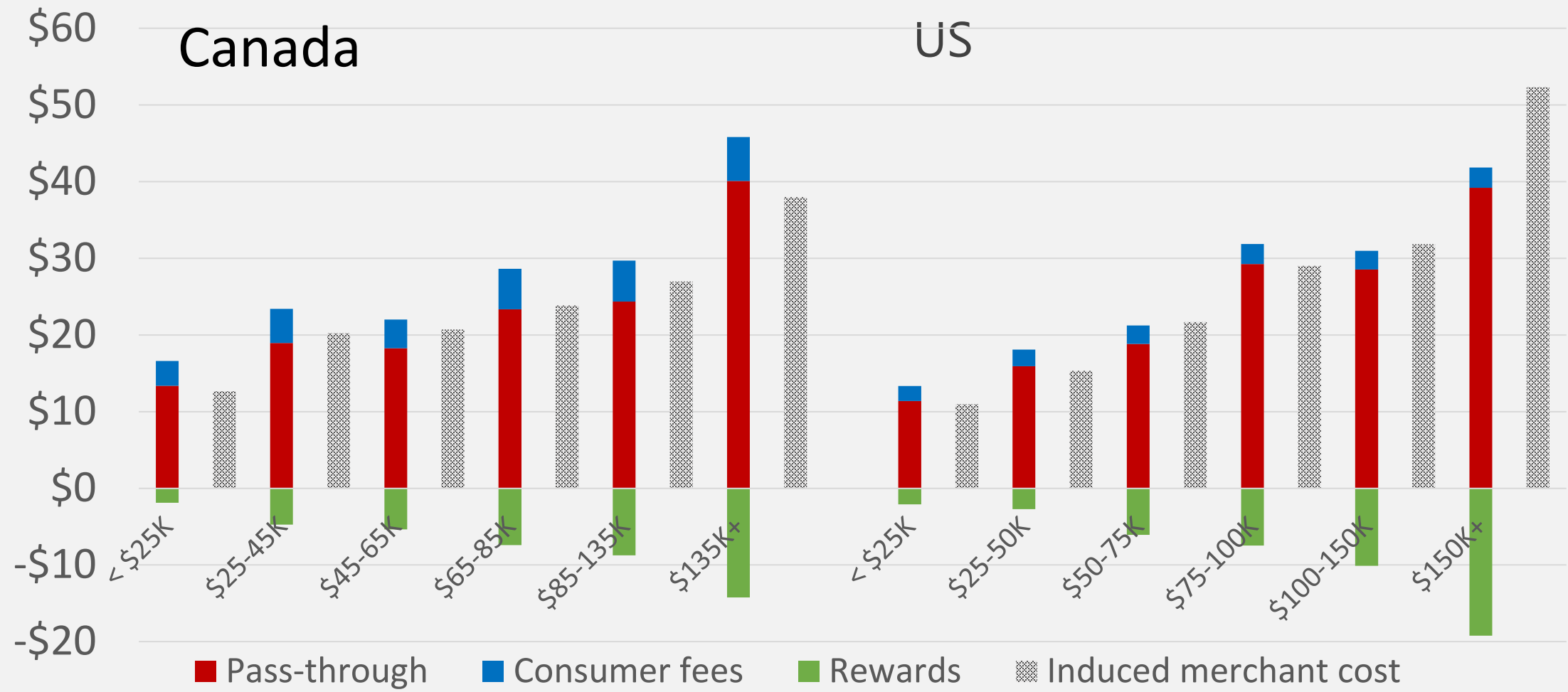
- Using data from Canada and the U.S., we quantify the **net pecuniary cost** of using cash, credit cards, and debit cards to consumers in a range of **income cohorts**.
- **Net cost** includes:
  - › the merchants' cost of accepting payments that is passed on to consumers,
  - › fees paid to financial institutions,
  - › rewards received from credit or debit card issuers.
- We examine whether low-income consumers incur a **disproportionally greater** net pecuniary cost relative to their transaction amount.



# Key findings

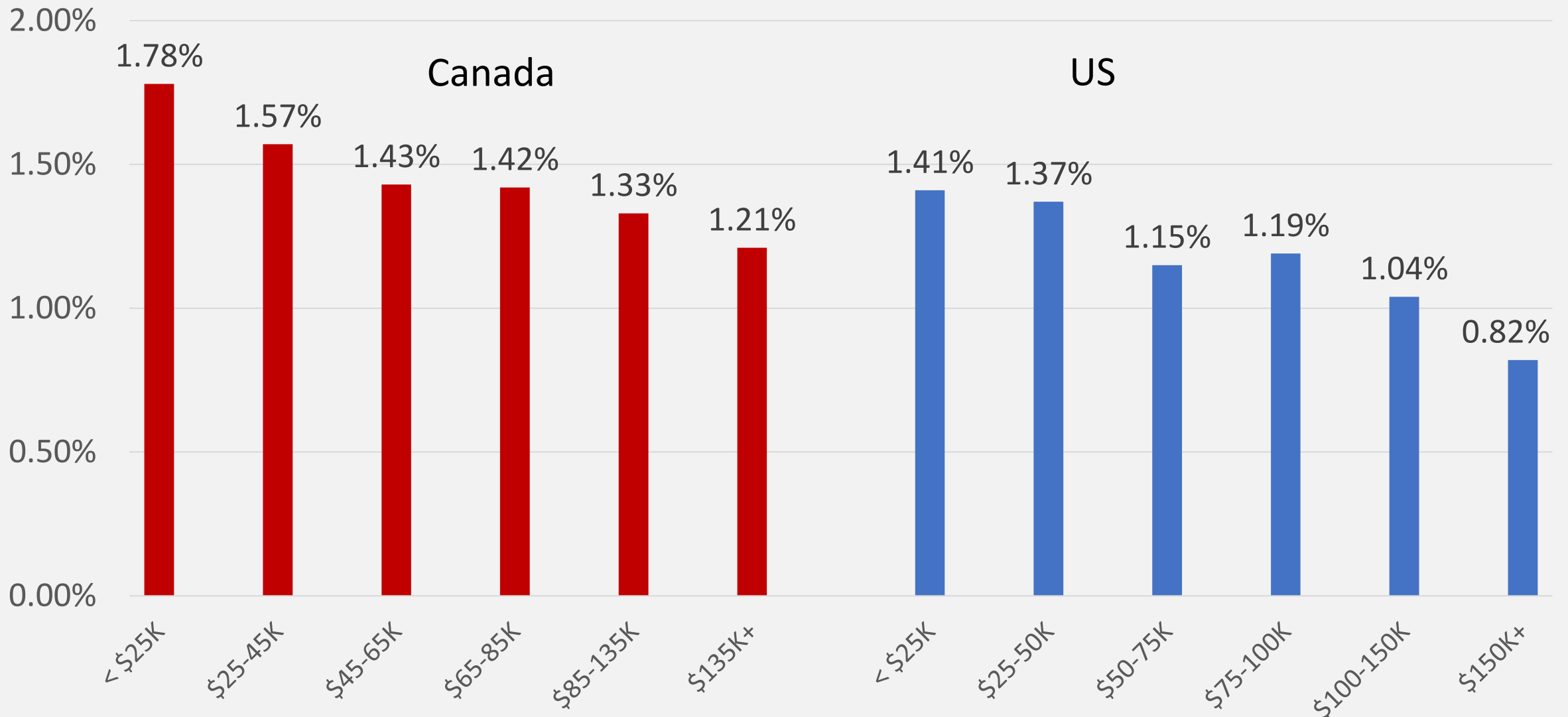
- In both Canada and the U.S., consumers in the **highest-income cohort** pay **the least** as a percentage of their transaction amount, while consumers in the **lowest-income** cohort pay **the most**.
  - suggests regressive distributional effects on consumers in both countries.
- Distributional effects occur through
  - › Merchant cost pass-through leads to higher retail prices for all
  - › Fees that are proportionally high for low-income consumers
  - › Card rewards benefitting high-income consumers
- Regressive distributional effects are robust to specific quantitative assumptions.

# Merchant pass-through contributes most of the pecuniary costs



Income categories are in local currencies; costs and rewards are in \$US.

# Per dollar net pecuniary cost is regressive



# Ways to mitigate distributional effects

- Reducing credit card rewards along with interchange fees:
  - › Lower income consumer might benefit
  - › *Caveats: (i) Pass-through of interchange fees reduction assumed to be 100%.  
(ii) Excludes subsequent effects and externalities generated by [the two-sided credit card payment system](#).*
  
- Changing the fee structure associated with bank accounts,
  - › Reduce regressive effect stemming from account fees
  - › *Caveats: (i) Same features are assumed for low-cost and typical bank accounts.  
(ii) Excludes subsequent effects and externalities.*
  
- Raising consumers' awareness of merchant cost pass-through.
  - › Should lower merchant cost and hence cost of pass-through for all
  - › *Caveat: We did not quantify the effect of awareness and steering.*

# Concluding remarks

- Simple model to quantify net pecuniary costs shows that card payments induce regressive effects.
- Consumers have limited awareness that individual payment preferences generate costs for all.
- Changes to prices on both consumer and merchant sides or introduction of new payment features/methods can have unintended consequences.
- COVID-19 public health shock has shifted transactions to low contact sectors where cash is not accepted, increasing the significance of electronic payments.

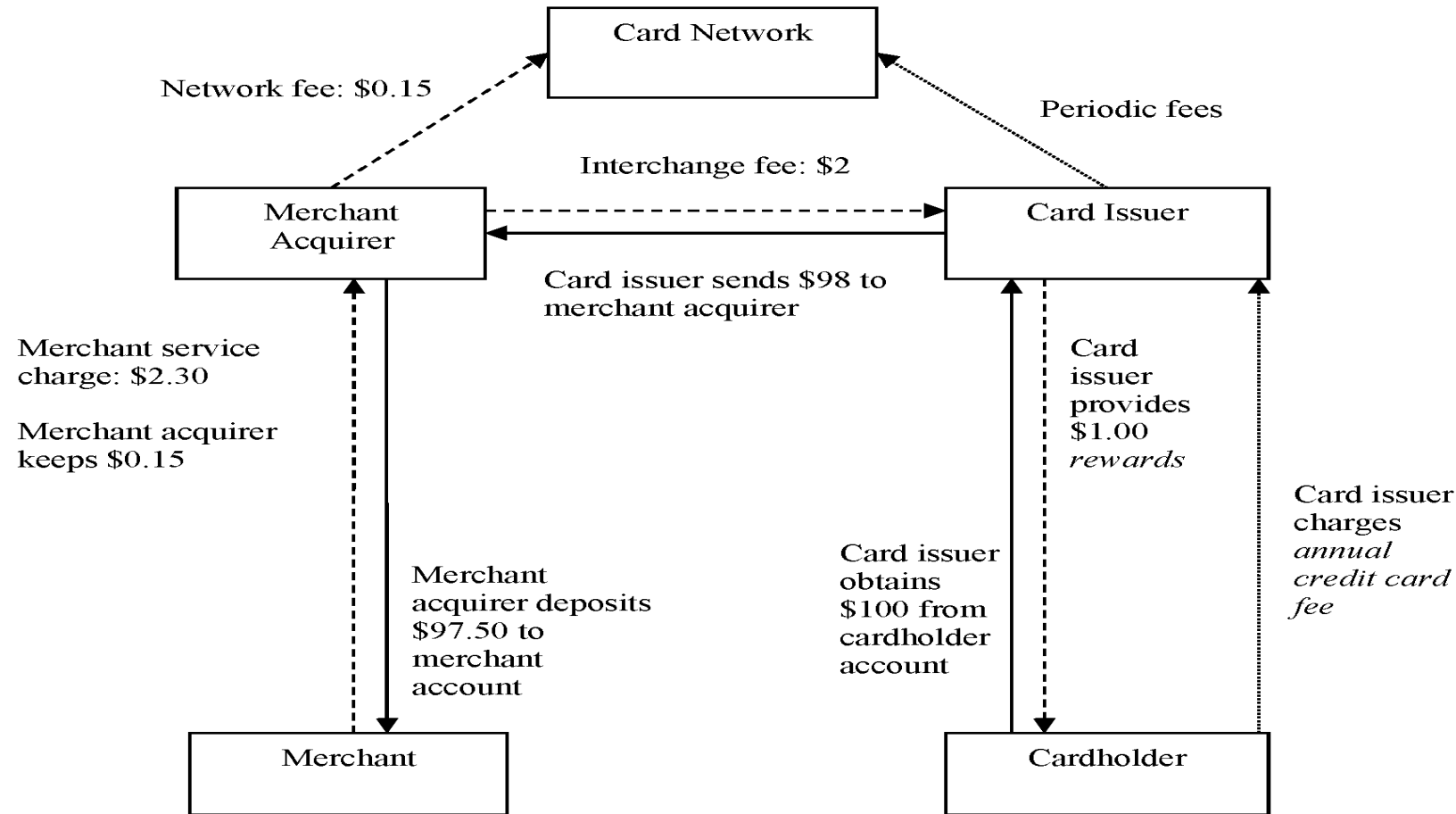


A low-angle, upward-looking photograph of several modern skyscrapers with glass facades. The buildings are arranged in a way that they appear to converge towards the top center of the frame. The sky is a clear, bright blue with scattered white clouds. The glass reflects the sky and each other, creating a complex pattern of light and dark blue. A semi-transparent dark grey horizontal band is overlaid across the middle of the image, containing the text.

**Merci! Thank You! Kiitos!**



# Two-sided payment card platform



Cardholder purchases a \$100 good with a credit card at merchant

*Merchant cost pass-through is included in \$100*

Note: Amounts and fee are illustrative. This example displays a four-party card payment system where issuer, network and acquirer can be separate entities.