



# Financial inclusion in the cashless society?: Challenges and initiatives in Sweden

National Bank of Ukraine, Kiev  
(2018-06-12)

S V E R I G E S R I K S B A N K

Gabriel Söderberg

# Agenda

- Financial inclusion and payments
- Sweden towards a cashless society
- Core message: Sweden has reached a state where we need to take a fresh look on the topic of financial inclusion - access to central bank money is important



# Financial Inclusion

Financial inclusion is a key enabler to reducing poverty and boosting prosperity.

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“Financial inclusion means that individuals and businesses have access to useful and affordable financial products and services that meet their needs – transactions, payments, savings, credit and insurance – delivered in a responsible and sustainable way.”



# Is cash a problem for financial inclusion?



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# Access to payments can be supplied by both government and private sector

- Deposit money generally private money, cash generally public money issued by central bank
- Since cash does not necessarily entail an account it is often seen as a hinder toward financial inclusion
- A problem is that we forget that cash is central bank money
- Can loss of access to central bank money be a form of financial exclusion?

# Sweden in the news: towards a cashless society

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## 'No Cash' Signs Everywhere Has Sweden Worried It's Gone Too Far

By [Amanda Billner](#)

den 18 februari 2018 12:00 Updated on den 19 februari 2018 10:40

- ▶ Cash usage declining both as share of GDP and in nominal terms
- ▶ Riksbank committee could publish report on issue in summer

Sweden 'Most Cashless' Society in the World

DIGITAL PAYMENTS

## Sweden sprints toward cashless society

Sweden is the most cashless society on the planet. But Germany is skeptical about the rapid transformation to a world without bills and coins.

*Roman Tyborski and Stephanie Ott*

*March 4, 2018 10:58 am*

## Sweden leads way to a cashless world

The Swedish central lender Riksbank is has project underway called the eKrona to see whether to supply digital central bank money to the public



Mahmoud Kassem

March 5, 2018

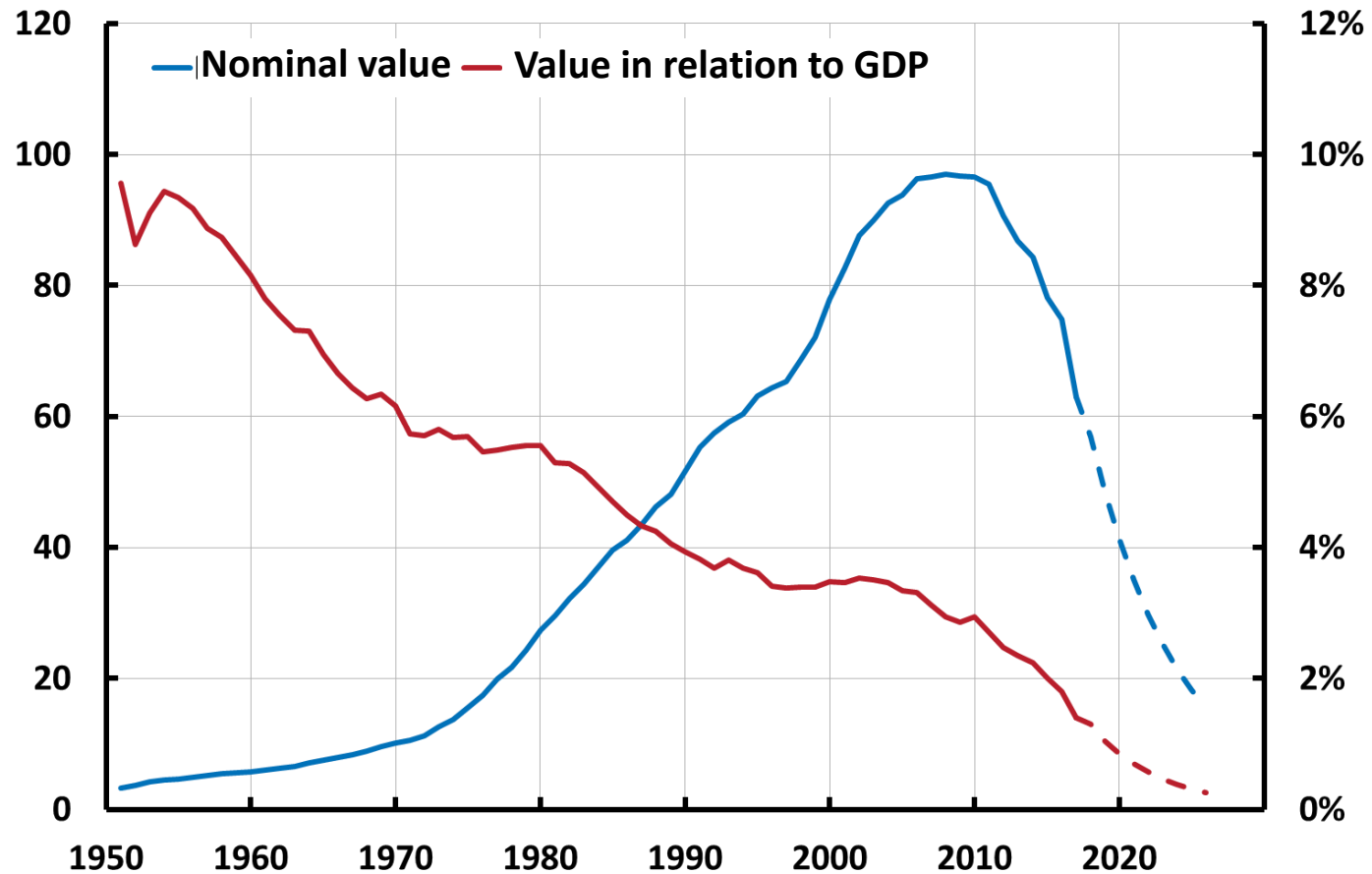
Updated: March 5, 2018 03:33 PM



## Sweden's strive towards a cashless society: problematic or the future?

By [Safiya Bashir](#) - February 19, 2018

# Successful financial inclusion?



SEK bn. (annual average). Cash in circulation/GDP. The broken lines illustrate a potential development based on a trend from 2010.

Sources: Statistics Sweden and the Riksbank

# G20 Financial Inclusion Indicators

## Sweden

### Key Indicators

Account (% age 15+)  
(Global Findex, 2014)

100%

Made or received digital  
payments (% age 15+)  
(Global Findex, 2014)

99%

Received wages or  
government transfers into  
an account (% age 15+)  
(Global Findex, 2014)

78%

## Ukraine

### Key Indicators

Account (% age 15+)  
(Global Findex, 2014)

53%

Made or received digital  
payments (% age 15+)  
(Global Findex, 2014)

48%

Received wages or  
government transfers into  
an account (% age 15+)  
(Global Findex, 2014)

40%

## Congo, Dem. Rep.

### Key Indicators

Account (% age 15+)  
(Global Findex, 2014)

17%

Made or received digital  
payments (% age 15+)  
(Global Findex, 2014)

15%

Received wages or  
government transfers into  
an account (% age 15+)  
(Global Findex, 2014)

5%



# A common occurrence in Sweden



# Why is Sweden so far ahead? My personal theory



- Strong state with high degree of trust
  - Trust in government handling of personal information → facilitates financial identification
  - Mandatory tax accounts
  - The *Postgiro* from 1925
- Oligopolistic banking sector
  - Easier to maintain trust in stability of account money
  - Easier to collaborate on joint infrastructure
  - *Bankgiro* from 1950
  - Bank-ID
  - Swish from 2012
- Dialectics, not always without conflict, between public and private initiatives



# Financial inclusion can create new forms of exclusion

## The Swedes rebelling against a cashless society

By Maddy Savage  
Business reporter, Stockholm

🕒 6 April 2018

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# No public access to central bank money?

- Ensuring access to zero risk money
- Ensuring resilience
  - Every-day malfunctions
  - Cyber attacks/war/natural disasters
- Financial inclusion
  - People without bank accounts
  - People with difficulties
- Efficiency
  - Future concentration , higher prices etc





Så här skulle ett kort med digitala kontanter kunna se ut. ILLUSTRATION: SVD

Vice riksbankschef Cecilia Skingsley presenterar planerna på en så kallad e-krona, som skulle vara ett komplement till traditionella kontanter. FOTO: LARS PERSSON

# Riksbanken vill satsa på digitala kontanter

Riksbankens planer på digitala kontanter, en så kallad e-krona, är en konsekvens av att det blir allt svårare att hantera kontanter. Man kallar e-krona. Det skulle fungera som ett komplement till traditionella kontanter. Det kan exempelvis, enligt Cecilia Skingsley, ske genom ett kontantkort knutet till ett konto i Riksbanken. Det skulle vara en bra lösning för att bli av det här, men designen återstår att se. Skingsley räknar alltså med att det skulle vara en effektiv lösning.

# E-kronan kan ta över enkronan

Enkronan används allt mindre, men i stället kommer e-kronan. Så blir det om Riksbanken beslutar sig för att ge ut elektroniska pengar. Menar vice riksbanks-

-Vi ligger i täten, ingen annan centralbank har kommit lika långt. Men det beror på att Sverige ligger så tidigt i övergången till elektroniska betalningar. Då måste även

Men detta är än så länge Cecilia Skingsleys egna uppfattningar, inte Riksbankens. Mycket återstår att utreda, även sådant som om konton med e-kronor ska vara räntebärande och hur systemet skulle fungera vid eventuell bankkris.

## Handelsblatt

FINANZEN UNTERNEHMEN POLITIK TECHNIK SPORT VIDEO AUTO PANORAMA SOCIAL MEDIA SERVICE

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Handelsblatt > Finanzen > Banken + Versicherungen > Stefan Ingves: Elektronische Währung statt Bargeld

### SCHWEDISCHER NOTENBANKCHEF INGVES „Wir können nicht warten“

von: Yasmin Osman • Helmut Steuer  
Datum: 27.11.2016 18:46 Uhr

**PREMIUM** Stefan Ingves ist der Gouverneur der Riksbank. Im Interview erklärt er, warum eine „E-Krona“ als elektronische Währung für Schweden wichtig wäre – und weshalb er sich für die Einführung von E-Kronen für Banken einsetzt.

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## Sweden's Riksbank eyes digital currency

Oldest central bank to decide on e-krona within two years



© Bloomberg

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## Suecia estudiará la adopción de una corona digital

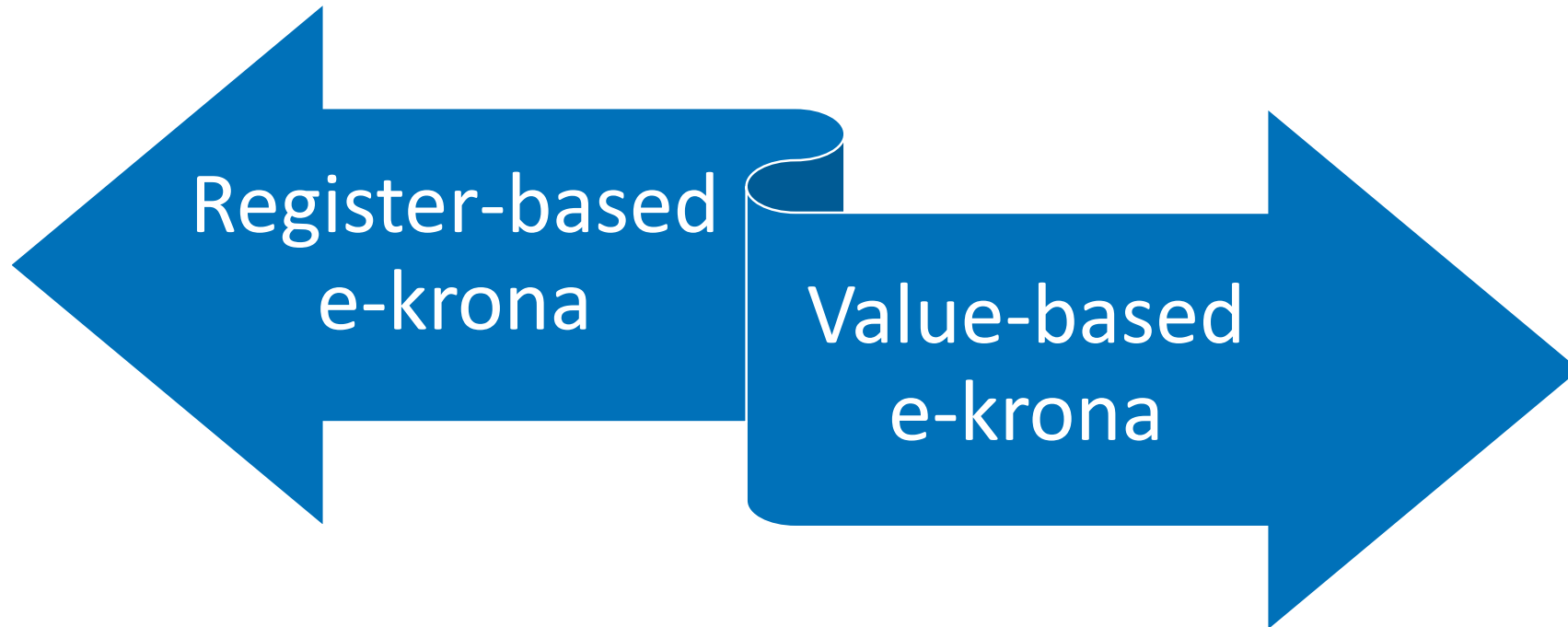
El Banco Nacional de Suecia (Riksbank) anunció ayer que estudiará durante los próximos dos años si recurre o no al uso de una moneda electrónica. La vicepresidente de la institución, Cecilia Skingsley, justificó esta posibilidad resaltando que los suecos usan cada vez menos efectivo ya que la cantidad de dinero en circulación descendió un 40% desde 2009, pero destacó que antes es necesario investigar cuestiones técnicas, jurídicas y prácticas. "Emitir coronas electrónicas es algo completamente nuevo para un banco central y no hay nadie de quien podamos aprender", afirmó Skingsley.



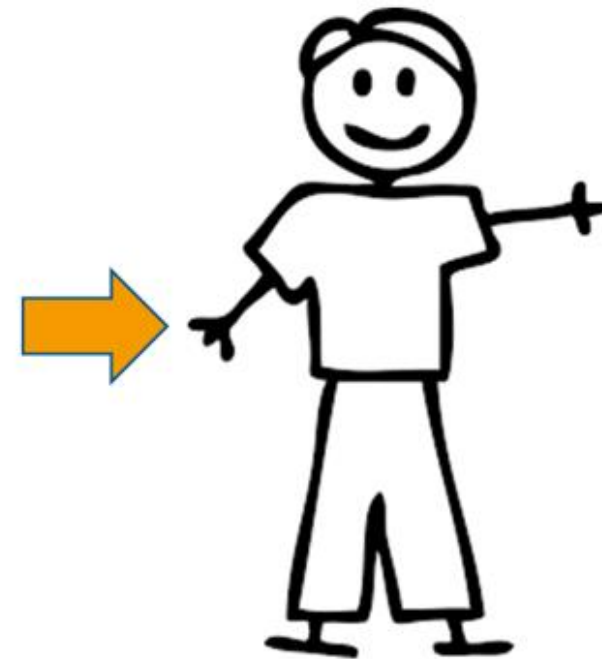
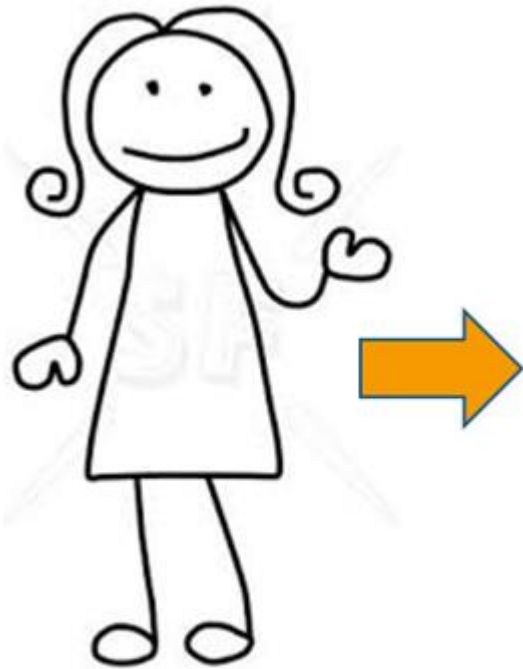
# The e-krona

- Central bank money in digital form for the public
- No decision taken yet
- 24/7
- Real time

## Two main options

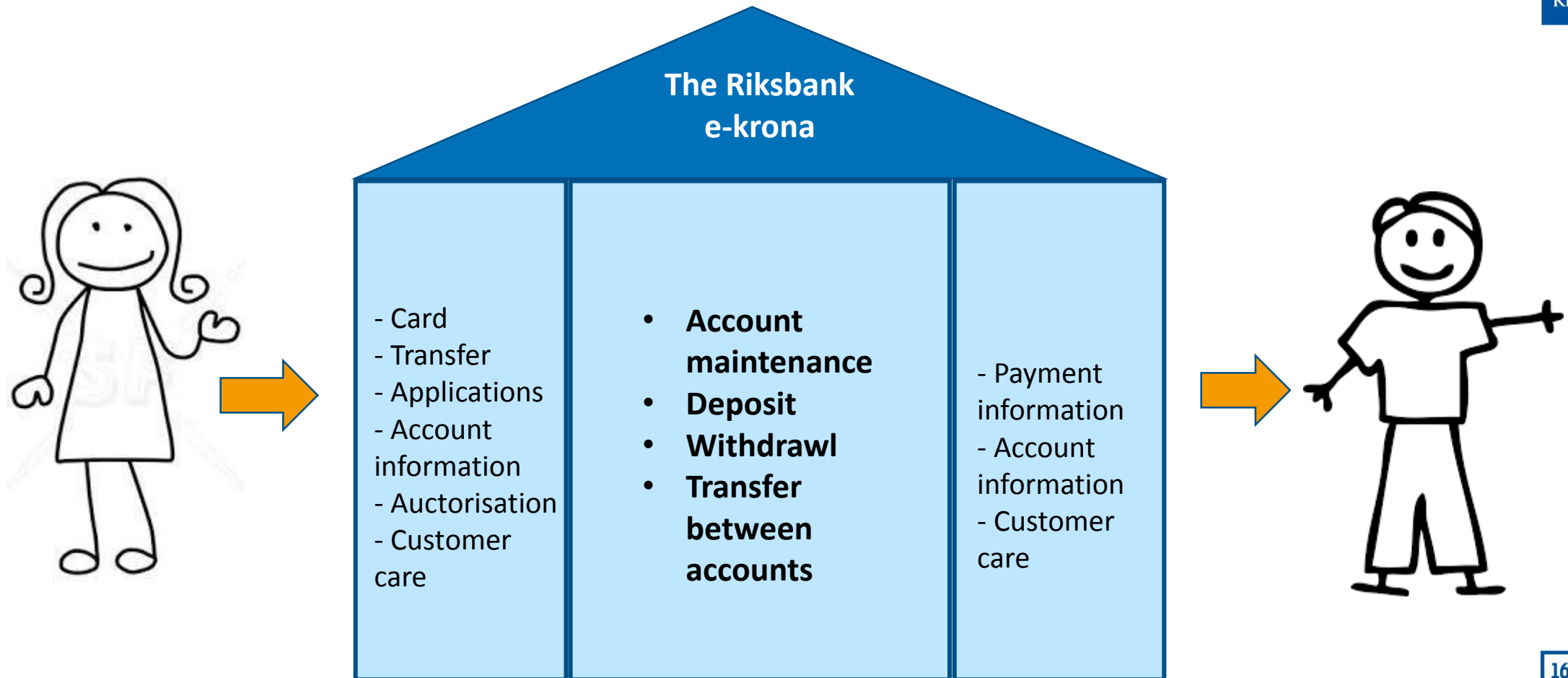


# The Riksbank's operative role in an e-krona system can vary

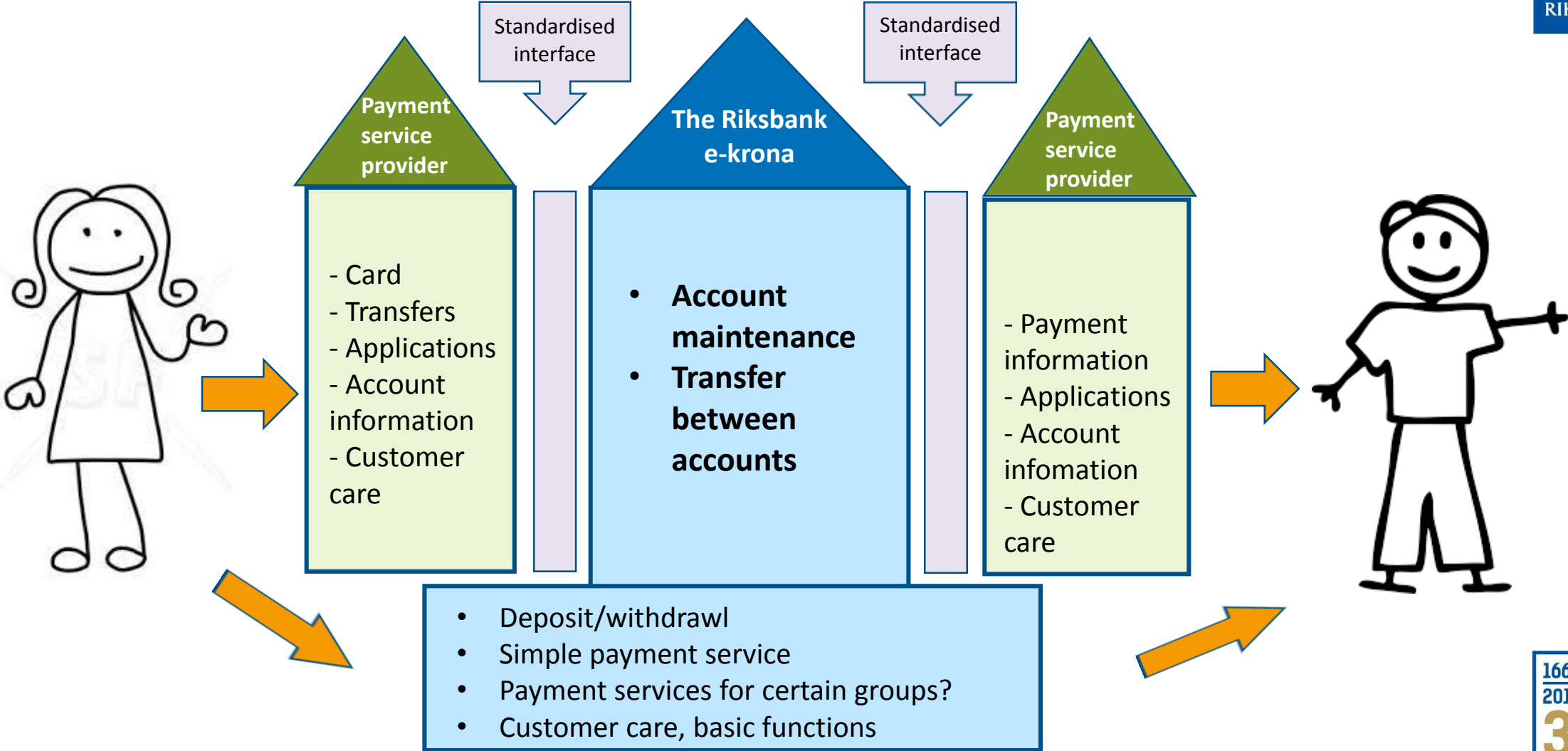




# Register-based e-krona with significant Riksbank commitment



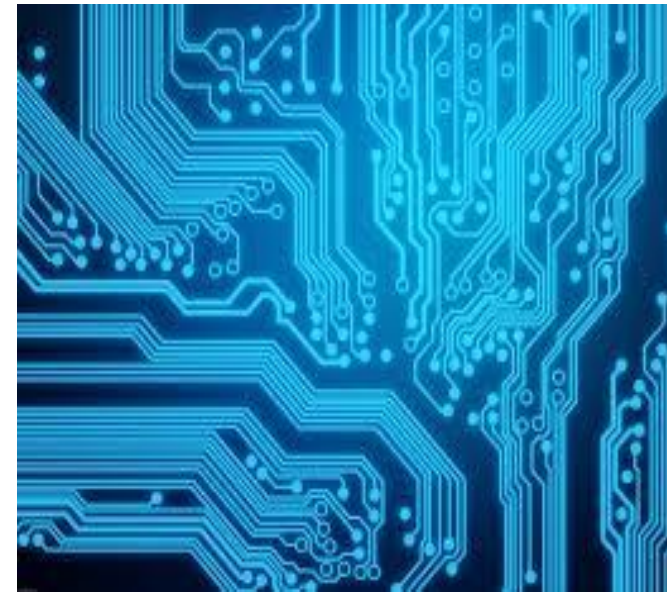
# Register-based e-krona with significant supplier commitment



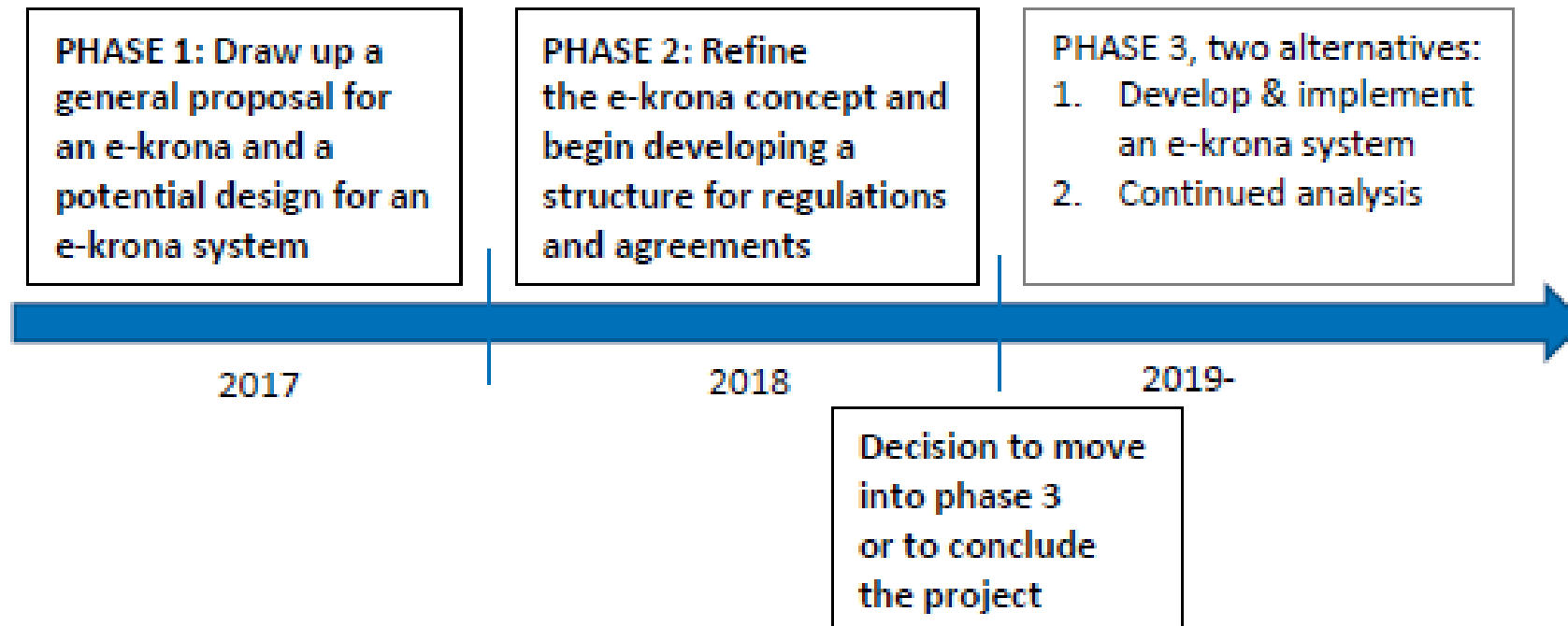
# Choice of technology

- Central data base
- DLT, Distributed Ledger Technology (eg. Blockchain)
  - Relatively untested, no applications similar to the e-krona
  - Ongoing research at central banks and other institutions
- Conclusion:
  1. Decide on properties and functions that the technology should fulfil
  2. Examine what technology is best suited to reach these criteria

→ Further investigation is necessary



# Overall timeline, the e-krona project





# Conclusion

- The Swedish road to financial inclusion was a combination of public and private initiatives
- Financial inclusion a continual process with changing challenges
- Financial inclusion in the future, as in the past, will depend on a dialectic relationship between central banks, governments and private enterprise