## 7 Rumors of the death of checks are greatly exaggerated.

Just as universal as the rise of POS debit has been the decline of checks. Figure 1 shows the development of checks written per person in the high check usage countries, as well as three low usage countries. Check usage in the four high usage countries appears to be in constant decline: about 5% per year in Canada and France, around 8% per year in the UK and the US. In the UK the rate of decline seems to be accelerating, although the instrument maybe around for a while. In 2011, the UK banks announced their intention to withdraw the check altogether only to find fierce consumer and political resistance. They were effectively forced to scrap their plans. This illustrates how difficult it is to completely retire payment instruments.

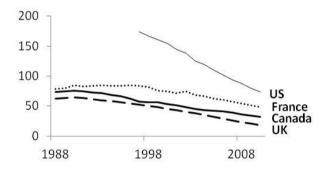


Figure 1: Checks written per person per year in high usage countries

For Belgium and the Netherlands we observe something close to a 'reversed S-curve', i.e. a logistical curve with a<0 (Figure 2). For Belgium the estimated values is a= -0.24, so the speed of check dis-adoption curve is comparable to debit card adoption. For the Netherlands we get a much steeper a= -0.43, perhaps because that country actively phased out the instrument altogether in 2001, in contrast to Germany and Belgium where the checks continue to be used at low levels.

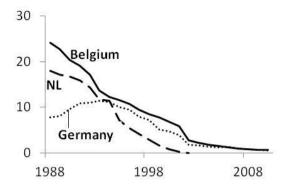


Figure 2: Checks written per person per year in low usage countries

An interesting instrument that showed S-curves both on the way up and on the way down is the Telex, pictured below.

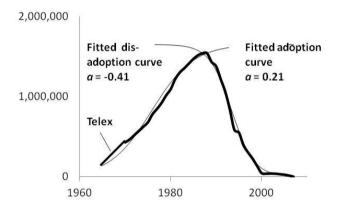


Figure 3: Number of telex lines worldwide<sup>1</sup>

As the telex gained adoption in the 1960s, the number of telex lines grew by over 20% each year from 1965 to 1970. From 1970 to 1980 growth continued at a slower 10% per year, slowing to 6% in the early 80s. With the rise of electronic networks like SITA (airline industry) and SWIFT (banks), the number of subscribers started to decline as of 1987. Slowly at

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<sup>&</sup>lt;sup>1</sup> Source: UPU

first, by 7% per year from '87-'92, but then faster, reaching a decline of 39% per year in the years '02 to '07.

The number of subscribers appears to follow 2 S-curves: one for the original adoption and a second one for the dis-adoption as the telex was replaced with newer technologies like electronic computer networks. Figure 3 shows these two curves. The first one has a steepness parameter of a=0.21 comparable to the adoption of debit card transactions. The second one has a steepness parameter of a=-0.41, much stepper and comparable to the steepness of check decline in the Netherlands. One can think of the telex and checks as intermediate technologies: better than what they replaced (phone/mail/cash) but eventually driven out by more efficient electronic networks.

It is interesting to compare the dis-adoption of telex with the adoption of SWIFT, one of the electronic networks replacing the telex. Figure 4 shows the number of banks using SWIFT with a fitted logistical curve. The steepness parameter a has a value of 0.17, which means the adoption of SWIFT was much slower than the decline of the telex.

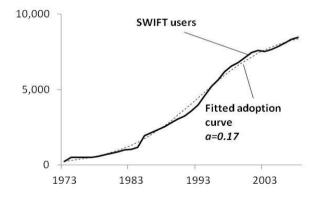


Figure 4: Number of SWIFT users

A possible explanation for this disparity could be that many SWIFT banks kept their telex lines to communicate with counterparties that were not yet on SWIFT. Once the new

networks gained critical mass, there was a backlog of banks ready to decommission the telex, leading to a rapid decline.