

POLYMER BANKNOTES IN NEW ZEALAND

“THE FIVE YEAR REPORT”

Brian Lang

(Currency Manager, Reserve Bank of New Zealand, 2004)

It is now five years since the first polymer notes were introduced into circulation in New Zealand in May 1999 with all denominations converted to polymer by March 2000. Brian Lang, Head of Currency at the Reserve Bank of New Zealand, has recently completed the “Five Year Report” for polymer notes in New Zealand and IPCA spoke to him about the New Zealand experience.

What were the key drivers for the decision to adopt the polymer note technology?

In 1996/97 we had a significant increase in good quality paper counterfeits. Our concern was that the key public security features for paper notes at that time required the notes to be held up to the light for verification (watermark and thread) and this is an uncommon practice in New Zealand. The window area in a polymer note enables easier verification.

We also had continual public concern being expressed with the quality of our paper \$5 and \$10 notes with soilage and limpness affecting these denominations quite badly. The public sees the cleanliness of the notes as the key benefit of polymer. Lower cost of issue is an indirect benefit that helps justify the conversion but is not of particular relevance to the public.

What are the key benefits of the polymer notes for the community?

The key benefit of polymer notes to the community in New Zealand is the ability of the notes to retain their structure and remain relatively clean. People see this as THE major benefit of polymer. There has also been a very significant drop in the number of counterfeits to the extent that very few are detected at the Central Bank (0.27 counterfeits per million notes in circulation in 2003/04).

What have been the other benefits of the polymer notes in New Zealand?

The key focus is to provide currency to the public as efficiently and effectively as possible.

From a cost/benefit point of view we have seen significant savings in the provision of banknotes and currency operations.

Note issue costs have been reduced by 54% in the past four years, saving NZ\$7.7 million. We believe that we have now offset all our conversion costs and will have ongoing savings for the foreseeable future. The polymer notes are maintaining a high level of quality and durability in circulation with average unfit note rates of 14% in the 2003/04-year compared with 63% for paper notes in 1997/98.

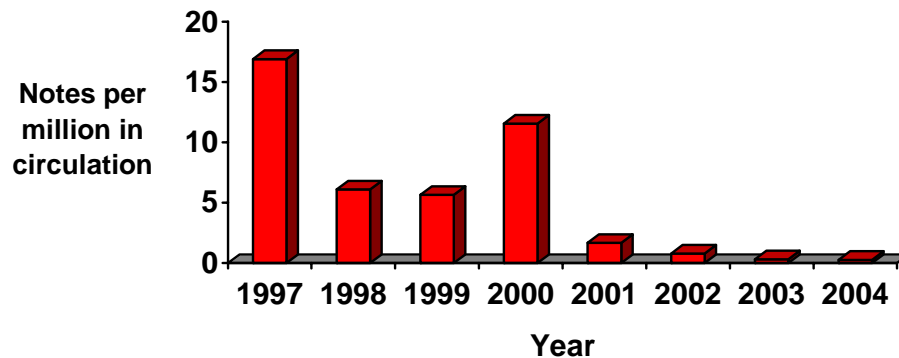
We have been able to considerably downsize Central Bank cash operations in New Zealand and I believe that the success and speed with which this was achieved in 2000/01 was directly attributable to the polymer conversion. This was partly due to the fact that we had a complete “refresh” of notes in circulation, but the ongoing ability of polymer notes to retain their structure, significantly reduces the need for the Central

Bank to continually machine process to maintain quality. The very low counterfeit rate of polymer notes has also reduced our need to monitor rigorously for validity. We have reduced annual cash operation costs by 55% between 1997/98 and 2003/04.

In view of your experience, what would be your recommendation to other Central Banks considering the polymer note technology?

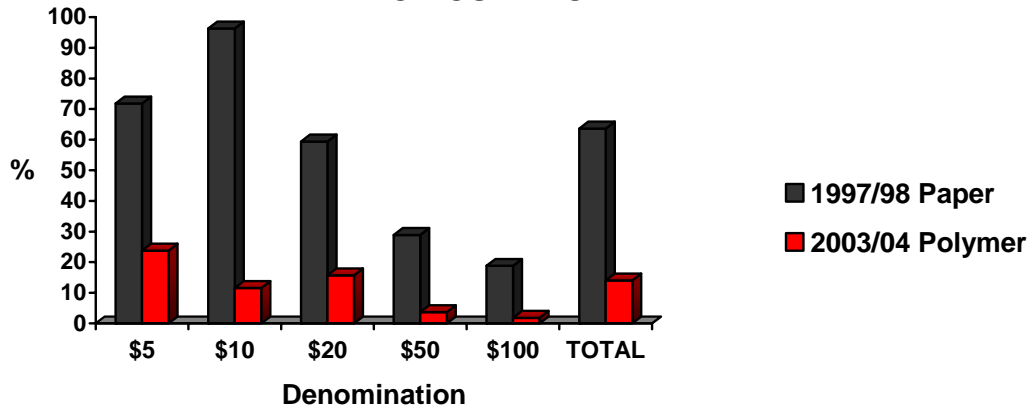
In my view the key benefits of the polymer notes for the public (cleanliness, structure, more effective security features) are readily transferable to other countries even though the cost of issue results may differ. Having experience issuing both paper and polymer notes, it is now more important than ever for issuers to properly assess these very significant benefits of polymer notes.

COUNTERFEITED NOTES PER MILLION IN CIRCULATION

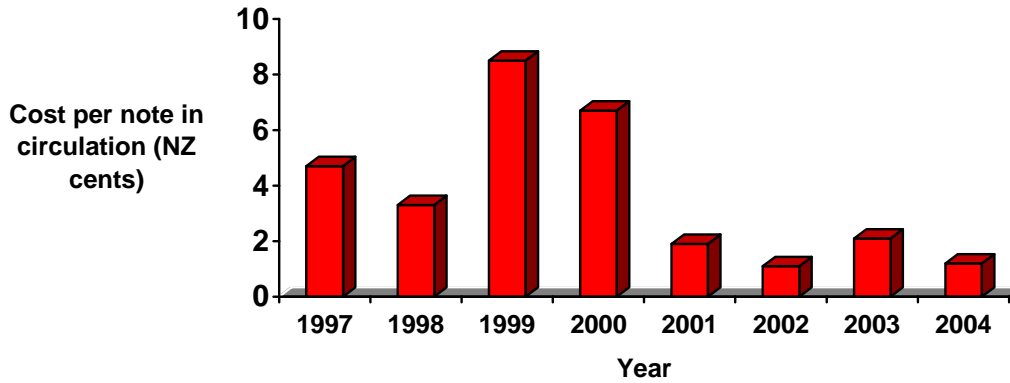


The counterfeits detected in 2000 & 2001 were all paper notes (mainly \$10 and \$50 notes which were the last denominations to be converted to polymer). To date we have detected no counterfeits reproduced on polymer; all have been produced on paper. In the year ending 30 June 2004 we machine processed 66 million notes and detected just 28 counterfeits.

NOTES DESTROYED AS A PERCENTAGE OF NOTES IN CIRCULATION

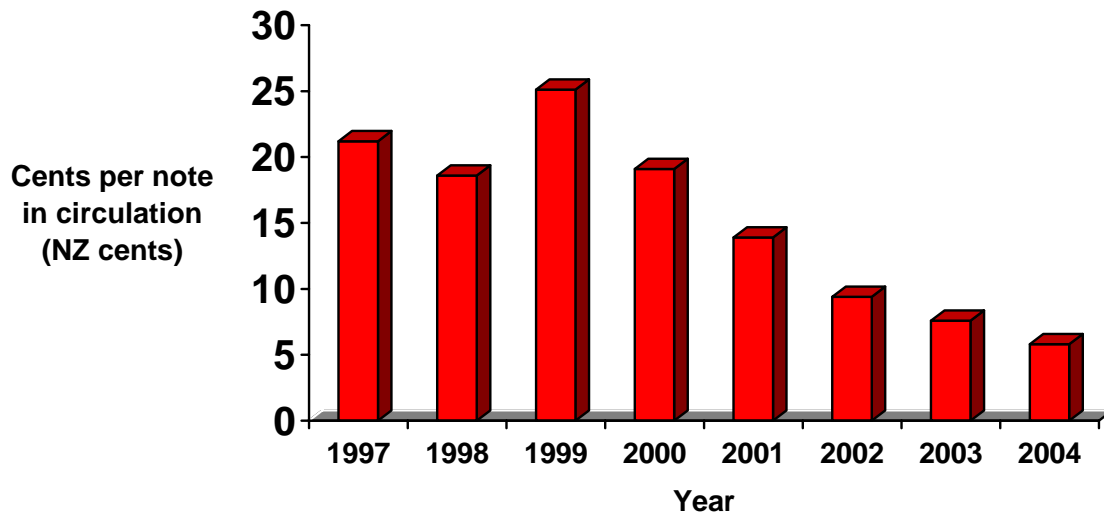


ISSUE COST PER BANKNOTE IN CIRCULATION



For the June years ending 1997 & 1998 only paper notes were issued. In 1999 & 2000 all paper notes were withdrawn and replaced with polymer. In 2001 to 2004 only polymer notes were issued.

FUNCTIONAL COST PER BANKNOTE IN CIRCULATION



The above graph illustrates the very significant reduction in total operating expenses, including note issue, since 2001 after the Bank introduced polymer banknotes, closed its branches and scaled down its note processing role. The higher cost in 1999 was attributable to the complete conversion of paper banknotes to polymer and Y2K contingencies.