AcF305: International Financial and Risk Management

Week 5 tutorial questions

1. Suppose that you are quoted the following NZD/FC spot and forward rates:

	Spot bid-ask	3-mo. forward bid-ask	<i>p.a.</i> 3 month Euro-interest	6-mo.forward bid-ask	<i>p.a.</i> 6 month Euro-interest
NZD			5.65-5.90		5.47-5.82
USD	0.5791-0.5835	0.5821 - 0.5867	3.63-3.88	0.5839-0.5895	3.94-4.19
EUR	0.5120-0.5159	0.5103-0.5142	6.08-6.33	0.5101 - 0.5146	5.60-6.25
DKK	3.3890-3.4150	3.3350-3.4410	6.05-6.30	3.3720-3.4110	5.93-6.18
CAD	0.5973-0.6033	0.5987-0.6025	1.71-1.96	0.5023-0.5099	2.47 - 2.75
GBP	0.3924-0.3954	0.3933-0.3989	5.09-5.34	0.3929-0.3001	5.10-5.35

- a. What are the three-month synthetic-forward NZD/USD bid-ask rates?
- b. What are the six-month synthetic-forward NZD/EUR bid-ask rates?
- c. What are the six-month synthetic-forward NZD/DKK bid-ask rates?
- d. What are the three-month synthetic-forward NZD/CAD bid-ask rates?
- e. In a–d, are there any arbitrage opportunities? What about least cost dealing at the synthetic rate?
- 2. Michael Milkem, an ambitious MBA student from Anchorage, Alaska, is looking for free lunches on the foreign exchange markets. Keeping his eyes glued to his Reuters screen until the wee hours, he spots the following quotes in Tokyo:

Exchange rate: Spot	NZD/USD	1.59–1.60	JPY/USD	100–101
180 - day Forward	NZD/GBP NZD/USD	2.25–2.26 1.615–1.626	JPY/GBP JPY/USD	150–152 97.96–98.42
•	,	2.265–2.274	JPY/GBP	146.93–149.19
Interest rates (simple, <i>p.a.</i>)				
180 days	USD	5%-5.25%	JPY	3%-3.25%
-	NZD	8%-8.25%	GBP	7%-7.25%

Given the above quotes, can Michael find any arbitrage opportunities?