

**Online Appendix**  
**for**

**Capital Flow Waves:**  
**Surges, Stops, Flight, and Retrenchment**

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## Appendix A: Data Set on Flows

Our primary source of flow data is quarterly gross capital inflows and outflows from the International Monetary Fund's *International Financial Statistics* (accessed through Haver Analytics in January 2012). There are a number of modifications necessary to transform the IFS flows data into a usable dataset:

- Many countries' flows are reported in millions of U.S. dollars, but some are in billions. Because our episodes are defined within the context of a single country's flows, this would not impact our empirical work, but we convert all to billions of U.S. dollars.
- Some countries (Taiwan and Singapore, for example, as well as 2001 data for the Slovak Republic) are not in the quarterly IFS flows data, but quarterly flows data are readily accessible from national sources. Using the quarterly data from national sources, we add Taiwan and Singapore to the dataset and fill in 2001 data for the Slovak Republic.<sup>1</sup>
- Some countries (such as Norway for 1992 and 1993) have no quarterly BOP data in the IFS for a gap in the series, but annual BOP data exist for that period; we fill that gap by (equally) dividing the annual numbers into the quarters.<sup>2</sup>
- For some countries, IFS flow data exist for certain time periods, but upon inspection it becomes obvious that the data are all zeros and/or have many gaps; in those cases we drop all data prior to certain dates (Greece pre-1999, Bolivia pre-1988, Peru pre-1991).
- Upon inspection it is not clear that the IFS properly differentiates between true zeros and NAs (not availables). We cannot settle this issue, but have a two-fold strategy to deal with it. First, if there is a string of NAs surrounded by strings of zeros, we replace those interior NAs with zeros.<sup>3</sup> Second, if these interior NAs or any reported zeros are actually due to the variable not being reported, there is a natural fix in the BOP presentation: errors and omissions (E&O). That is, if outward portfolio investment is not collected but is reported as zero, it should appear in the BOP accounts as a negative

<sup>1</sup> Sources for non-IFS data are as follows: Slovak Rep. (01q1-01q4) <http://www.nbs.sk/en/statistics/balance-of-payments-statistics/en-platobna-bilancia>; Taiwan <http://www.cbc.gov.tw/ct.asp?xItem=2070&cNode=512&mp=2>; and Singapore's BOP dataset.

<sup>2</sup> Other 'annual to quarterly' fixes include Poland 1995-1999 and India's outward FDI 1991-1996.

<sup>3</sup> Interior NAs that we fill with zeros include the following: Taiwan (1990q4, portfolio investment liabilities), Slovenia (1994, portfolio investment liabilities); India (1991-1996 and 1999, portfolio investment assets); Indonesia (1995Q2-Q4, portfolio investment assets and other investment assets; 2003Q3-2003Q4, portfolio investment assets and direct investment assets); Thailand (1991-1992, portfolio investment assets); Bangladesh (2001Q3-Q4, direct investment assets); Mexico (1994-1995, direct investment assets); and Guatemala (1995-2000, direct investment assets). Note that while some of these are likely true zeros (and so our fix is appropriate), those that are not should be alleviated by our E&O fix, described below.

E&O. Our fix is, in robustness checks, to assign any positive E&O to inflows and any negative E&O to outflows.<sup>4</sup>

- Finally, we compared annualized data from our final flows dataset to the annual IMF BOP dataset. For some countries (such as Switzerland) annual BOP data pre-date quarterly data. We do not use the annual data to backfill data for those countries, as annual data are decidedly different from quarterly when examining extreme flow episodes. Other than earlier start dates for some countries in the annual dataset, the two datasets are nearly identical, with the lone discrepancy being for Belgium-Luxembourg (a construct that, because of limited availability of some explanatory variables, does not appear in our regressions).

After making all of the adjustments described above, we include all countries for which quarterly data for balance of payments flows are available for at least ten years. While data are available for 2010 for many countries, capital flows data are prone to substantial revisions for a year, so we end our dataset in Q42009.

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<sup>4</sup> We thank Gian Maria Milesi-Ferretti for advising us on this particular fix. Note that a blanket fix, such as assigning all E&O to unreported inflows or all to unreported outflows, might work for a particular country but not across a broad set of countries (as some are more likely to have holes in different aspects of the BOP accounts). Thus, a data-driven fix is more appropriate: If E&O is negative, assign it to outflows; when E&O is positive, assign it to inflows.

**Appendix Table 1: Country and Time Period Representation**

<b>Country</b>	<b>Start year</b>	<b>Country</b>	<b>Start year</b>
Argentina	1980	Latvia	1993
Australia	1980	Lithuania	1993
Austria	1980	Malaysia	1999
Bangladesh	1980	Mexico	1980
BelLux	1980	Netherlands	1980
Bolivia	1988	New Zealand	1980
Brazil	1980	Nicaragua	1992
Canada	1980	Norway	1980
Chile	1991	Panama	1998
Colombia	1996	Peru	1991
Croatia	1993	Philippines	1980
Czech Republic	1993	Poland	1995
Denmark	1981	Portugal	1980
Estonia	1992	Romania	1991
Finland	1980	Russia	1994
France	1980	Singapore	1995
Germany	1980	Slovak Rep.	1993
Greece	1999	Slovenia	1992
Guatemala	1980	South Africa	1980
Hong Kong	1999	Spain	1980
Hungary	1989	Sri Lanka	1980
Iceland	1980	Sweden	1980
India	1980	Switzerland	1999
Indonesia	1981	Taiwan	1987
Ireland	1981	Thailand	1980
Israel	1980	Turkey	1984
Italy	1980	UK	1980
Japan	1980	US	1980
Korea	1980	Venezuela	1994

**Notes.** The table shows the 58 countries in our sample, as well as the dates for which quarterly gross capital flows data begin in our dataset. All data series end in 2009 and are from the IFS unless noted in Appendix A.

**Appendix Table 2: Surge, Stop, Flight, and Retrenchment Episodes by Country (1980 to 2009)**

	<u>Surges</u>		<u>Stops</u>		<u>Flight</u>		<u>Retrenchment</u>	
	<u>Start</u>	<u>End</u>	<u>Start</u>	<u>End</u>	<u>Start</u>	<u>End</u>	<u>Start</u>	<u>End</u>
Argentina	1990q4	1992q3	1982q4	1983q1	1989q3	1990q1	1982q3	1982q4
	2003q1	2003q4	1989q2	1990q3	1991q2	1992q3	1988q3	1989q1
			1994q4	1995q1	2002q4	2003q1	1992q4	1993q2
			1998q4	1999q3	2006q3	2008q3	1998q3	1999q2
			2000q4	2002q2			2009q2	2009q4
			2008q2	2009q3				
Australia	1980q4	1983q1	1983q2	1984q1	1980q1	1980q2	1980q4	1981q2
	1993q4	1994q3	1989q3	1991q3	1984q2	1985q1	1989q2	1991q1
	1995q3	1996q3	1997q3	1998q1	1995q4	1996q3	1994q4	1995q2
	2002q3	2002q4	1998q3	1998q4	2004q1	2004q3	2003q1	2003q3
	2003q4	2004q3	2005q1	2005q4	2006q2	2007q1	2005q1	2005q4
	2006q2	2007q1						
Austria	1980q3	1980q4	1981q3	1982q3	1992q2	1993q1	1981q4	1982q3
	1992q2	1993q1	1996q4	1997q1	1997q2	1998q1	1986q1	1986q2
	1999q2	2000q1	1998q2	1998q3	1999q2	2000q1	1993q3	1993q4
	2005q1	2005q4	2001q1	2002q1	2005q1	2005q4	1998q2	1998q3
			2006q1	2006q4			2001q2	2002q1
			2008q3	2009q3			2006q1	2006q4
							2008q4	2009q4
Bangladesh	1989q1	1989q4	1982q4	1983q3	1987q1	1987q3	1992q2	1993q1
	1998q1	1998q3	1991q3	1992q1	1988q2	1989q3	2001q1	2001q4
	2003q4	2004q1	2006q1	2006q2	1995q3	1997q1	2009q3	2009q4
	2005q1	2005q2			2005q4	2006q3		
					2008q2	2008q4		
Belgium - Luxembourg	1987q1	1987q4	1981q1	1982q2	1987q1	1987q4	1981q1	1982q2
	1999q3	2000q3	1988q2	1989q1	1999q3	2000q3	1988q2	1989q1
			1994q1	1995q1	2005q2	2006q1	1994q1	1995q1
			2001q4	2002q3			2001q4	2002q3
			2008q2	2009q3			2008q2	2009q3
Bolivia	1996q1	1996q3	1995q1	1995q2	1994q1	1994q4	2004q3	2005q1
	2007q3	2008q4	1999q2	2001q2	2001q1	2001q2	2006q2	2006q3
			2006q3	2007q2	2003q3	2004q1		
					2008q4	2009q3		
Brazil	1988q1	1988q4	1982q4	1983q4	1984q2	1985q1	1982q4	1983q4
	1990q2	1991q1	1993q1	1993q3	1987q4	1988q3	1985q2	1985q4
	1994q1	1994q3	1995q1	1995q2	1994q2	1994q4	1992q1	1992q4
	1995q4	1996q2	1999q1	1999q2	1998q3	1999q2	1995q2	1996q1
	2006q3	2007q4	2008q2	2009q3	2006q4	2007q3	1997q4	1998q2
							2008q2	2008q3

	<u><b>Surges</b></u>		<u><b>Stops</b></u>		<u><b>Flight</b></u>		<u><b>Retrenchment</b></u>	
	<u><b>Start</b></u>	<u><b>End</b></u>	<u><b>Start</b></u>	<u><b>End</b></u>	<u><b>Start</b></u>	<u><b>End</b></u>	<u><b>Start</b></u>	<u><b>End</b></u>
Canada	1996q4	1997q3	1982q2	1983q2	1986q2	1986q4	1982q2	1983q2
	2000q1	2001q1	1991q2	1991q3	1994q2	1994q4	1993q2	1993q3
	2006q2	2007q1	1995q2	1996q1	1996q3	1997q2	1995q2	1996q1
			1999q1	1999q4	2000q1	2001q1	1998q1	1998q3
			2008q4	2009q2	2006q2	2007q1	2008q4	2009q3
Chile	2005q4	2006q3	2000q2	2001q1	1998q2	1999q4	1997q2	1997q3
	2007q4	2008q3	2007q1	2007q2	2006q1	2006q4	2000q2	2000q4
			2009q1	2009q3	2007q2	2008q1	2008q3	2009q3
Colombia	2005q4	2006q3	2008q2	2009q1	2006q2	2006q3	2002q2	2003q1
							2007q2	2007q3
Croatia	2002q4	2003q4	1998q4	1999q2	2000q1	2000q4	2001q3	2002q1
			2004q4	2005q3	2002q4	2003q1	2004q4	2005q4
					2006q4	2007q3		
Czech Republic	2002q3	2003q1	2003q2	2004q1	2003q3	2005q1	2000q1	2000q4
			2006q2	2006q4			2002q1	2002q3
			2008q4	2009q3			2008q4	2009q4
Denmark	1993q3	1994q2	1986q4	1987q2	1993q3	1994q2	1986q4	1987q2
	1995q3	1996q2	1989q2	1989q4	1999q4	2001q1	1992q2	1993q2
	2005q1	2005q4	1991q4	1993q2	2005q2	2005q4	1994q3	1995q1
			1994q3	1995q1			2001q2	2002q2
			1998q3	1999q1			2008q3	2009q4
			2001q2	2002q1				
			2008q4	2009q4				
Estonia	1997q4	1998q1	1998q3	1999q3	1997q4	1998q1	1998q4	1999q1
	2003q1	2005q1	2008q2	2009q4	2001q1	2001q2	2000q1	2000q2
					2004q2	2005q3	2008q2	2009q3
Finland	1984q3	1985q1	1985q4	1986q2	1985q1	1985q2	1983q3	1984q2
	1987q1	1987q4	1991q1	1992q2	1986q3	1987q1	1985q4	1986q2
	1996q3	1997q3	2001q1	2001q4	1988q3	1989q1	1987q3	1987q4
	1998q4	1999q1	2009q2	2009q3	1993q1	1993q3	1990q3	1990q4
	2004q3	2004q4			1998q4	1999q1	1992q1	1992q3
	2006q2	2007q1			2004q3	2005q1	2001q1	2001q4
					2006q2	2006q4	2009q1	2009q3
France	1986q3	1987q4	1981q3	1982q2	1986q4	1987q4	1981q1	1983q2
	1997q4	1998q3	1991q1	1992q1	1992q3	1992q4	1991q2	1992q1
	2001q1	2001q2	2001q4	2002q3	1997q4	1998q3	2001q4	2002q3
			2008q1	2009q3	2001q1	2001q2	2008q1	2009q3



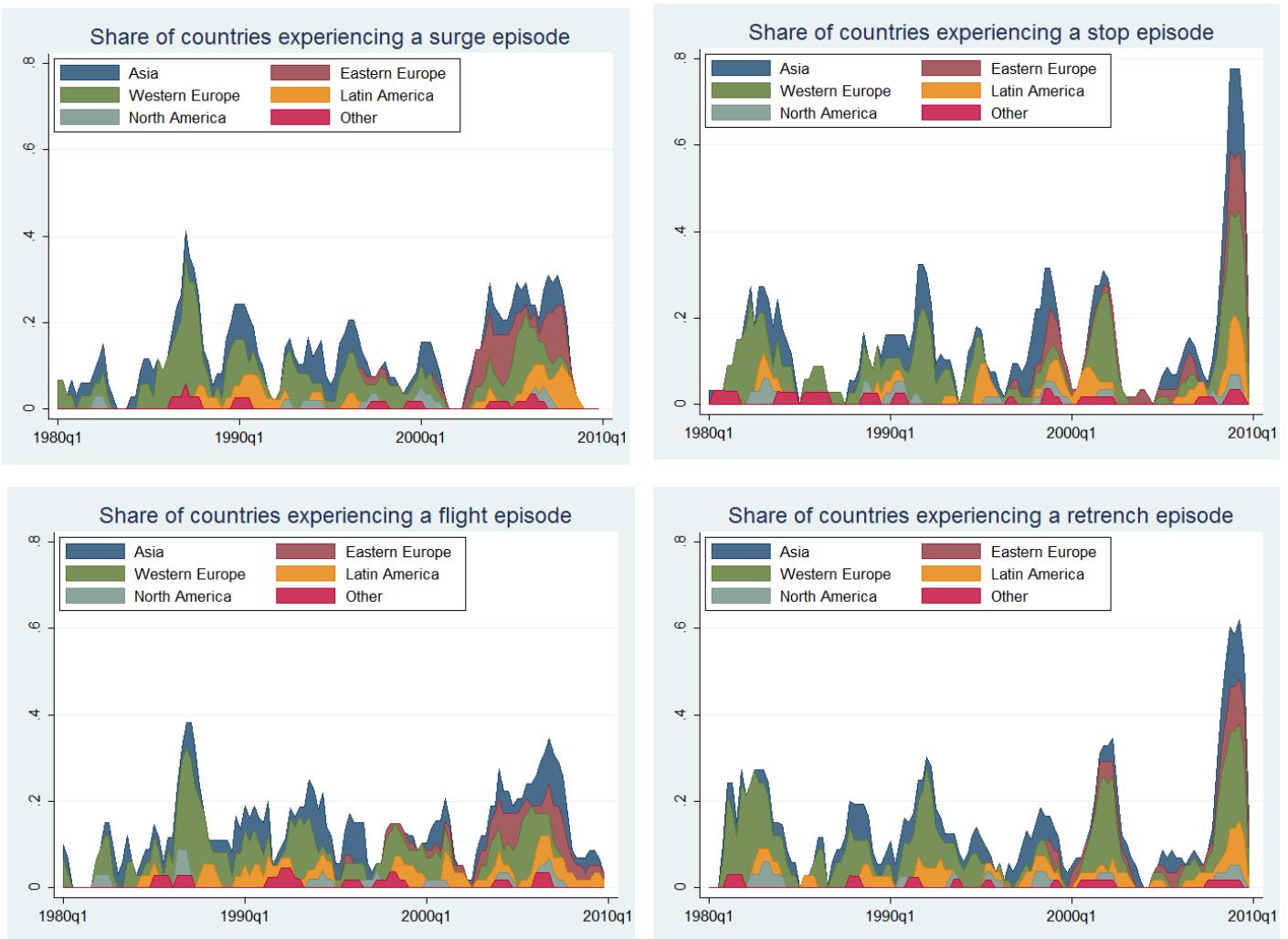
	<u><b>Surges</b></u>		<u><b>Stops</b></u>		<u><b>Flight</b></u>		<u><b>Retrenchment</b></u>	
	<u><b>Start</b></u>	<u><b>End</b></u>	<u><b>Start</b></u>	<u><b>End</b></u>	<u><b>Start</b></u>	<u><b>End</b></u>	<u><b>Start</b></u>	<u><b>End</b></u>
Ireland	1986q4	1987q3	1991q3	1992q2	1987q2	1988q1	1991q4	1992q2
	1989q3	1990q2	2001q2	2001q3	1989q3	1990q1	2000q4	2001q3
	1992q4	1993q4	2008q2	2009q3	1992q3	1993q1	2008q2	2009q3
	1995q3	1996q3			1995q4	1996q3		
	1997q4	1999q1			1997q4	1998q4		
	2003q3	2004q2			2003q3	2004q2		
	2006q3	2007q3			2006q3	2007q2		
Israel	1986q2	1987q1	1980q2	1981q3	1986q2	1987q1	1981q1	1981q4
	1989q4	1990q3	1983q4	1984q4	1992q1	1992q3	1991q1	1991q3
	1999q2	2000q1	1988q3	1989q2	1998q1	1998q4	1993q3	1993q4
	2006q1	2006q4	1996q3	1996q4	2006q1	2006q4	1995q2	1995q3
			1998q3	1998q4			2001q2	2002q2
			2001q2	2002q2			2007q3	2009q2
			2007q3	2007q4				
			2008q4	2009q2				
Italy	1987q1	1987q3	1982q2	1983q1	1987q1	1987q3	1982q2	1983q1
	1996q1	1997q1	1991q4	1992q2	2003q1	2003q4	1986q1	1986q2
	2003q1	2003q4	1992q4	1993q3	2005q1	2005q4	1993q1	1993q3
	2005q2	2006q1	1999q1	1999q2			2000q3	2002q3
			1999q4	2002q3			2007q3	2008q4
			2007q3	2008q4				
Japan	1986q2	1987q3	1982q4	1983q1	1986q1	1987q2	1982q4	1983q1
	1993q4	1995q1	1990q4	1991q4	1993q4	1994q4	1987q4	1988q3
	2000q2	2001q1	1992q2	1993q1	2000q2	2001q1	1990q3	1991q3
			1998q1	1999q1			1996q3	1996q4
			2005q2	2005q3			1998q2	1999q4
			2006q3	2007q1			2008q3	2009q3
			2008q3	2009q3				
Korea	1994q3	1995q4	1997q2	1998q3	1994q2	1995q4	1997q3	1999q1
			2008q1	2009q2	2002q4	2003q3	2005q1	2005q3
					2006q1	2007q4	2008q3	2009q3
	2003q3	2005q1	1998q4	1999q2	2006q3	2007q4	1998q4	1999q2
	2006q2	2007q4	2005q3	2005q4			2005q3	2006q1
			2008q3	2009q3			2008q3	2009q2
Latvia	2004q2	2004q3	2000q4	2001q2	2004q1	2004q4	2001q2	2001q3
	2005q4	2006q2	2008q3	2009q4			2008q3	2009q3
	2006q4	2008q1						
Lithuania	1986q4	1987q3	1991q3	1992q2	1987q2	1988q1	1991q4	1992q2
	1989q3	1990q2	2001q2	2001q3	1989q3	1990q1	2000q4	2001q3
	1992q4	1993q4	2008q2	2009q3	1992q3	1993q1	2008q2	2009q3

		<u><b>Surges</b></u>		<u><b>Stops</b></u>		<u><b>Flight</b></u>		<u><b>Retrenchment</b></u>	
		<u><b>Start</b></u>	<u><b>End</b></u>	<u><b>Start</b></u>	<u><b>End</b></u>	<u><b>Start</b></u>	<u><b>End</b></u>	<u><b>Start</b></u>	<u><b>End</b></u>
Malaysia				2005q4	2006q3	2006q2	2007q4	2008q3	2009q2
				2008q3	2009q2				
Mexico	1989q2	1991q2	1994q4	1995q4	1987q3	1988q2	1991q3	1991q4	
	2007q3	2008q2	2008q4	2009q3	1990q1	1990q4	1992q2	1993q1	
					1993q2	1994q1	1997q3	1997q4	
					2001q3	2002q2	2008q4	2009q3	
Netherlands	1985q3	1987q1	1981q1	1982q3	1980q1		1980q4	1981q1	
	1995q3	1996q2	1990q4	1991q4	1986q2	1987q1	1981q4	1983q2	
	1997q4	1998q4	2001q2	2001q3	1997q4	1998q4	1990q4	1992q1	
	2005q2	2006q2	2002q1	2002q4	2005q2	2006q2	2001q2	2001q3	
			2008q1	2009q3			2002q1	2002q4	
New Zealand	1986q3	1987q2	1987q4	1988q3	1986q4	1987q2	1986q1	1986q2	
	2000q2	2001q1	1996q4	1997q2	1989q2	1990q2	1988q1	1989q1	
	2006q3	2007q3	1998q3	1999q2	1993q3	1994q2	2002q4	2003q3	
			2008q2	2009q3	2000q2	2001q1	2005q3	2006q1	
Nicaragua			2000q3	2001q2	2001q1	2001q2	1998q1	1998q4	
				2001q4	2002q1	2002q1	2002q4	2003q2	
Norway	1982q3	1982q4	1988q3	1989q2	1986q3	1987q3	1981q1	1981q2	
	1984q3	1985q3	1991q3	1992q2	1994q3	1995q3	1987q4	1988q4	
	1992q4	1993q2	1997q4	1998q1	2000q2	2001q2	1992q2	1994q1	
	2000q3	2000q4	2001q3	2002q1	2005q4	2007q1	1999q2	1999q3	
	2002q4	2003q2	2007q4	2008q4			2001q4	2002q3	
	2005q4	2007q1	2009q2	2009q4			2007q4	2008q3	
Panama			2008q4	2009q3			2008q4	2009q3	
Peru	2006q4	2008q2	1998q1	1998q2	2001q1	2001q2	2007q1	2007q2	
			1998q4	1999q3	2003q2	2004q1	2007q4	2008q3	
			2005q4	2006q1	2005q4	2006q3			
			2008q4	2009q3	2009q2	2009q4			
Philippines	1984q4	1985q2	1983q2	1984q2	1991q4	1994q2	1997q3	1998q2	
	1994q2	1994q3	1992q1	1992q2	1999q1	1999q2	2008q1	2008q4	
	1996q1	1997q1	1997q3	1998q4	2007q1	2007q2			
	2005q2	2005q4	2008q1	2009q1					
	2007q1	2007q3							
Poland	2003q4	2004q4	2001q4	2002q3	2004q2	2005q1	2002q3	2003q2	
	2007q1	2008q2	2008q4	2009q3			2008q3	2009q3	

	<u><b>Surges</b></u>		<u><b>Stops</b></u>		<u><b>Flight</b></u>		<u><b>Retrenchment</b></u>	
	<u><b>Start</b></u>	<u><b>End</b></u>	<u><b>Start</b></u>	<u><b>End</b></u>	<u><b>Start</b></u>	<u><b>End</b></u>	<u><b>Start</b></u>	<u><b>End</b></u>
Portugal	1981q2	1982q3	1983q4	1984q3	1982q2	1982q3	1980q4	1982q1
	1987q3	1988q2	1992q3	1993q2	1983q3	1984q1	1987q4	1988q1
	1988q4	1990q2	1996q2	1996q3	1990q2	1991q2	1989q4	1990q1
	1994q3	1995q3	1999q3	1999q4	1993q1	1993q4	1992q1	1992q2
	2000q1	2000q4	2002q4	2003q1	2003q3	2004q1	1996q1	1996q3
	2003q4	2004q2	2004q4	2005q2			2002q4	2003q1
	2006q1	2006q2	2008q3	2009q2			2004q3	2005q2
Romania	1996q4	1997q3	1999q4	2000q1	2003q4	2004q1	2007q4	2008q2
	2000q4	2001q2	2008q3	2009q4	2004q4	2005q3		
	2004q1	2005q3			2006q4	2007q2		
	2006q4	2007q4						
Russia	2003q2	2004q1	2006q2	2006q3	2003q2	2004q2	2001q3	2002q2
	2007q1	2008q1	2008q4	2009q3	2007q2	2009q1	2009q3	2009q4
Singapore	2006q4	2008q1	2008q2	2009q2	2006q2	2007q4	2008q2	2009q2
Slovak Republic	2004q3	2005q2	1998q4	1999q4	2008q2	2008q3	1999q1	1999q2
Slovenia	2002q3	2003q3	1997q4	1998q4	1998q3	1999q2	2008q1	2009q3
	2007q1	2007q4	2003q4	2004q2	2002q4	2003q3		
			2008q3	2009q3	2007q1	2007q4		
South Africa	1987q1	1987q4	1985q2	1986q3	1985q1	1985q4	1987q4	1988q2
	1997q2	1998q1	1990q2	1990q4	1991q2	1993q1	1999q1	1999q2
	2003q4	2004q4	1998q3	1999q2	1995q3	1996q2	2000q3	2001q1
	2005q2	2006q2	2000q3	2001q1	1997q2	1998q2		
			2007q1	2007q2	2003q4	2004q3		
			2008q3	2009q3	2006q1	2006q4		
Spain	1987q1	1988q2	1982q1	1983q2	1982q1	1982q4	1981q1	1981q2
	1990q4	1991q3	1985q2	1986q2	1988q2	1989q1	1983q2	1984q1
			1992q1	1992q2	1990q1	1991q2	1987q1	1987q3
			1994q2	1995q1	1992q3	1993q4	1991q4	1992q1
			2001q3	2002q2			1994q2	1995q1
			2008q1	2009q4			2001q3	2002q2
							2007q3	2009q3
Sri Lanka	1989q4	1990q3	1983q4	1984q4	1982q4	1983q3	1990q1	1990q2
	2000q1	2000q4	1994q2	1994q3	1990q3	1991q2	1993q2	1994q3
			1995q4	1996q1	1995q1	1995q3	1998q4	1999q1
			1998q3	1999q1	2007q3	2008q1	2001q4	2002q3
			2001q2	2002q1	2009q1	2009q3		
			2008q1	2008q2				

	<u><b>Surges</b></u>		<u><b>Stops</b></u>		<u><b>Flight</b></u>		<u><b>Retrenchment</b></u>	
	<u><b>Start</b></u>	<u><b>End</b></u>	<u><b>Start</b></u>	<u><b>End</b></u>	<u><b>Start</b></u>	<u><b>End</b></u>	<u><b>Start</b></u>	<u><b>End</b></u>
Sweden	1985q3	1987q3	1983q4	1984q3	1981q4	1982q3	1984q1	1984q4
	1989q2	1990q4	1991q2	1992q2	1986q2	1988q1	1991q1	1992q1
	2004q4	2005q3	1997q1	1997q3	1988q4	1990q3	1997q1	1997q3
			2001q4	2002q3	1995q3	1996q3	2001q1	2002q3
			2008q4	2009q3			2008q1	2009q3
Switzerland	2005q3	2006q2	2008q1	2009q1	2005q3	2006q1	2008q1	2009q1
Taiwan	1999q2	2000q2	1995q3	1995q4	1996q1	1996q3	1997q1	1997q4
	2003q3	2004q2	1997q4	1998q3	2000q1	2000q4	2002q2	2002q3
			2001q1	2001q2	2003q3	2004q1	2008q2	2009q2
			2005q1	2005q2				
			2008q4	2009q2				
Thailand	1987q4	1990q3	1982q1	1982q2	1983q2	1983q3	1984q2	1984q4
	1995q2	1996q1	1992q1	1992q4	1985q2	1986q1	1986q4	1988q4
	2004q3	2006q1	1996q3	1998q2	1989q3	1990q2	1991q2	1991q4
			2007q1	2007q4	1993q2	1994q2	1994q4	1995q1
			2008q3	2009q3	2005q1	2006q1	1996q3	1997q2
							2008q1	2009q3
Turkey	1990q1	1990q4	1991q3	1991q4	1991q1	1991q2	1994q3	1995q3
	1992q3	1993q4	1994q2	1995q1	1995q4	1996q3	2007q4	2008q2
	2000q1	2000q3	2001q1	2001q4	2006q4	2007q3	2009q2	2009q4
			2007q4	2008q2				
			2008q4	1980q1				
UK	1980q1	1980q2	1990q1	1990q3	1980q1	1980q2	1982q2	1983q1
	1985q3	1987q2	1991q3	1992q1	1985q4	1987q2	1991q3	1992q2
	1992q3	1993q4	1994q2	1994q4	1992q4	1993q2	1998q1	1998q4
			1998q1	1998q4	2000q3	2000q4	2001q3	2002q2
			2001q3	2002q2			2008q2	2009q2
			2008q2	2009q2				
US	1982q1	1982q3	1983q1	1983q3	1981q4	1982q3	1983q1	1984q1
	1992q3	1992q4	1988q3	1988q4	1986q2	1986q4	1990q3	1990q4
	1993q3	1994q3	1989q4	1990q4	1993q3	1994q2	1998q1	1998q4
	1999q4	2000q3	1998q1	1999q1	2004q1	2004q4	2001q3	2002q2
	2006q4	2007q2	2001q3	2002q2	2006q4	2007q3	2008q1	2009q2
			2007q4	2009q2				
Venezuela	2003q4	2004q1	2006q2	2006q4	2005q2	2006q2	2001q1	2001q4
	2005q2	2005q4					2006q4	2007q1
	2007q2	2008q1					2008q4	2009q3

**Appendix Figure 1**  
**Percent of Countries with Each Type of Episode: By Region**



**Note:** The “Other” region is South Africa and Israel.