

## Historical Aggregate AS Data Files

(Version: 16 March, 2023)

There are four historical aggregate AS data files available from [www.nuscricri.org](http://www.nuscricri.org) → Smart Data → Data Download → AS Data:

- 1.> AS\_Economy\_mean\_yyyymmdd.csv: contains mean ASs aggregated by the economy (region) of domicile of each firm, as well as the regions that are currently covered (Asia Pacific (Developed), Asia Pacific (Emerging), North America, Eurozone, Non-Eurozone, Latin America, Caribbean, Sub-Saharan Africa, Middle East, North Africa, Central Asia and Global).
- 2.> AS\_EconomySector\_mean\_yyyymmdd.csv: contains mean ASs aggregated by the economy (region) of domicile and sector of each firm. For example, the aggregate AS of all financial firms in Singapore is one of the groups in this file. The sector of each firm is as specified by the Level 1 Bloomberg Industry Classification System.
- 3.> AS\_Economy\_median\_yyyymmdd.csv: contains median ASs aggregated by the economy (region) of domicile of each firm, as well as the regions that are currently covered (Asia Pacific (Developed), Asia Pacific (Emerging), North America, Eurozone, Non-Eurozone, Latin America, Caribbean, Sub-Saharan Africa, Middle East, North Africa, Central Asia and Global).
- 4.> AS\_EconomySector\_median\_yyyymmdd.csv: contains median ASs aggregated by the economy (region) of domicile and sector of each firm. For example, the aggregate AS of all financial firms in Singapore is one of the groups in this file. The sector of each firm is as specified by the Level 1 Bloomberg Industry Classification System

Each of these files is a CSV file where different fields are delimited by commas. Each file contains two header lines. The first header line contains two fields, one field with information about the calibration dates for the different economies and the other field with the date that data is used up until for the calibration. For example, the header line:

Calibration dates: 20170206 AUS; GBR; 20170214 CHN, Data to: 20160729

indicates the models for Australia and UK were calibrated on 2017-02-06, while the model for China was calibrated on 2017-02-14. The three letter codes for the different economies are indicated in Table 2. The second field in the example indicates that all data available up until 2016-07-29 was used in the calibrations. Note that there can be different calibration dates for certain economies if data errors are identified after the initial calibration. The latest calibration data is indicated in the filenames.

The second header line of each file contains the column names for the data. These are listed and described in Table 1. All of the data associated with the same group is listed together, with the dates of the ASs in ascending order. All values are provided with a precision of six decimal places. Users should take note that for certain groups and at certain points in time, there can be a relatively small number of companies within the group. In these cases, changes in AS from one point to the next may not be due to changes in credit conditions, but instead may be due to changes in the composition of the group.

With effect from March 14, 2022, in computation of the Probabilities of Defaults (PDs) and Actuarial Spreads (AS), CRI switches classification system to the 2020 version of the Bloomberg Industry Classification Standard (BICS) from its 2007 version. For sector indicators in aggregate data up to 2020-12-31 and before, please refer to Table. For aggregate data from “Data up to 2021-06-30” and onwards, please refer to Table 3.

**Table 1: Column Header Line**

Sector ID	Sector Name
<b>ID</b>	Indicates the identity of the region or economy, with codes listed in Table 2.
<b>Sector</b>	Indicates the identity of the sector, with codes listed in Table 3 (this column is only in the EconomySector files).
<b>Year, Month</b>	The year and month of the AS. Data available up to the last day of this month is used in computing the AS.
<b>N_companies</b>	The number of firms of this group during each month.
<b>h_month</b>	AS horizon of h years, where h = 1, 2, 3, 4 and 5

**Table 2: Economy/Region ID**

Economy/Region ID		Economy/Region Name	Economy/Region ID		Economy/Region Name
AO	AGO	Angola	KY	CYM	Cayman Islands
AI	AIA	Anguilla	CY	CYP	Cyprus
AN	ANT	Netherlands Antilles	CZ	CZE	Czech Republic
AE	ARE	United Arab Emirates	DE	DEU	Germany
AR	ARG	Argentina	DM	DMA	Dominica
AM	ARM	Armenia	DK	DNK	Denmark
AG	ATG	Antigua and Barbuda	DO	DOM	Dominican Republic
AU	AUS	Australia	EC	ECU	Ecuador
AT	AUT	Austria	EG	EGY	Egypt
AZ	AZE	Azerbaijan	ES	ESP	Spain
BE	BEL	Belgium	EE	EST	Estonia
BJ	BEN	Benin	FI	FIN	Finland
BF	BFA	Burkina Faso	FJ	FJI	Fiji
BD	BGD	Bangladesh	FK	FLK	Falkland Islands
BG	BGR	Bulgaria	FR	FRA	France
BH	BHR	Bahrain	FO	FRO	Faeroe Island
BS	BHS	Bahamas	GA	GAB	Gabon
BA	BIH	Bosnia and Herzegovina	GB	GBR	United Kingdom
BZ	BLZ	Belize	GE	GEO	Georgia
BM	BMU	Bermuda	GG	GGY	Guernsey
BO	BOL	Bolivia	GH	GHA	Ghana
BR	BRA	Brazil	GI	GIB	Gibraltar
BB	BRB	Barbados	GM	GMB	Gambia
BW	BWA	Botswana	GR	GRC	Greece
CA	CAN	Canada	GD	GRD	Grenada
CH	CHE	Switzerland	GL	GRL	Greenland
CL	CHL	Chile	GT	GTM	Guatemala
CN	CHN	China	GF	GUF	French Guiana
CI	CIV	Ivory Coast	GU	GUM	Guam
CM	CMR	Cameroon	HK	HKG	Hong Kong
CD	COD	Democratic Republic of The Congo	HR	HRV	Croatia
CO	COL	Colombia	HU	HUN	Hungary
CV	CPV	Cape Verde	ID	IDN	Indonesia
CR	CRI	Costa Rica	IM	IMN	Isle Of Man
CU	CUB	Cuba	IN	IND	India
CW	CUW	Curacao	IE	IRL	Ireland

Table 2: Economy/Region ID (Cont.)

Economy/Region ID		Economy/Region Name	Economy/Region ID		Economy/Region Name
IR	IRN	Iran	MU	MUS	Mauritius
IQ	IRQ	Iraq	MW	MWI	Malawi
IS	ISL	Iceland	MY	MYS	Malaysia
IL	ISR	Israel	NA	NAM	Namibia
IT	ITA	Italy	NE	NER	Niger Republic
JM	JAM	Jamaica	NG	NGA	Nigeria
JE	JEY	Jersey	NI	NIC	Nicaragua
JO	JOR	Jordan	NL	NLD	Netherlands
JP	JPN	Japan	NO	NOR	Norway
KZ	KAZ	Kazakhstan	NP	NPL	Nepal
KE	KEN	Kenya	NULL	NULL	BRVM Region
KH	KHM	Cambodia	NZ	NZL	New Zealand
KN	KNA	Saint Kitts and Nevis	OM	OMN	Oman
KR	KOR	South Korea	PK	PAK	Pakistan
KW	KWT	Kuwait	PA	PAN	Panama
LA	LAO	Laos	PE	PER	Peru
LB	LBN	Lebanon	PH	PHL	Philippines
LC	LCA	Saint Lucia	PG	PNG	Papua New Guinea
LI	LIE	Liechtenstein	PL	POL	Poland
LK	LKA	Sri Lanka	PR	PRI	Puerto Rico
LT	LTU	Lithuania	PT	PRT	Portugal
LU	LUX	Luxembourg	PY	PRY	Paraguay
LV	LVA	Latvia	PS	PSE	Palestinian Territory, Occupied
MO	MAC	Macau	QA	QAT	Qatar
MA	MAR	Morocco	RE	REU	Reunion
MC	MCO	Monaco	RO	ROU	Romania
MD	MDA	Moldova	RU	RUS	Russian Federation
MG	MDG	Madagascar	RW	RWA	Rwanda
MX	MEX	Mexico	SA	SAU	Saudi Arabia
MH	MHL	Marshall Island	SD	SDN	Sudan
MK	MKD	Macedonia, the former Yugoslav Republic of	SN	SEN	Senegal
MT	MLT	Malta	SG	SGP	Singapore
MM	MMR	Myanmar	SJ	SJM	Svalbard And Jan Mayen Islands
ME	MNE	Montenegro	SL	SLE	Sierra Leone
MN	MNG	Mongolia	SV	SLV	El Salvador
MZ	MOZ	Mozambique	RS	SRB	Serbia

**Table 2: Economy/Region ID (Cont.)**

Economy/Region ID		Economy/Region Name	Economy/Region ID		Economy/Region Name
SK	SVK	Slovakia	VE	VEN	Venezuela
SI	SVN	Slovenia	VG	VGB	Virgin Islands, British
SE	SWE	Sweden	VI	VIR	Virgin Islands
SZ	SWZ	Swaziland	VN	VNM	Vietnam
SC	SYC	Seychelles	ZA	ZAF	South Africa
SY	SYR	Syria	ZM	ZMB	Zambia
TC	TCA	Turks And Caicos Islands	ZW	ZWE	Zimbabwe
TG	TGO	Togo	APD		Asia Pacific (Developed)
TH	THA	Thailand	APE		Asia Pacific (Emerging)
TT	TTO	Trinidad and Tobago	NA		North America
TN	TUN	Tunisia	EU		Europe
			EZ		- Eurozone
			NEZ		Non-Eurozone
			LAC		L' America & Caribbean
TR	TUR	Turkey	LA		- Latin America
			CBB		Caribbean
TW	TWN	Taiwan	SSA		Sub-Saharan Africa
TZ	TZA	Tanzania, United Republic of	MNC		Middle East, North Africa & Central Asia
			ME		- Middle East
			NAF		- North Africa
			CA		Central Asia
			ALL		All Economies
UG	UGA	Uganda			
UA	UKR	Ukraine			-
UY	URY	Uruguay			-
US	USA	United States			
UZ	UZB	Uzbekistan			-

**Table 3: Sector ID (BICS 2020)**

Sector ID	Sector Name
<b>Com</b>	Communications
<b>CD</b>	Consumer Discretionary
<b>CS</b>	Consumer Staples
<b>Ener</b>	Energy
<b>Fin</b> (sub-categories)	Financials (sub-categories)
<b>BANK</b>	Banking
<b>FS</b>	Financial Services
<b>INSUR</b>	Insurance
<b>RE</b>	Real Estate
<b>HC</b>	Health Care
<b>Indu</b>	Industrials
<b>Matl</b>	Materials
<b>Tech</b>	Technology
<b>Ute</b>	Utilities
<b>Misc</b>	Miscellaneous

**Table 4: Sector ID (BICS 2007)**

Sector ID	Sector Name
<b>BM</b>	Basic Materials
<b>Com</b>	Communications
<b>CC</b>	Consumer, Cyclical
<b>CnC</b>	Consumer, Non-cyclical
<b>Div</b>	Diversified
<b>Ener</b>	Energy
<b>Fin</b> (sub-categories)	Financial
<b>BANK</b>	Banks
<b>XBANK</b>	Non-banks
<b>Indu</b>	Industrial
<b>Tech</b>	Technology
<b>Ute</b>	Utilities