

## MAKING SENSE OF *THIS* WORLD

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**R&R Weekly Column**  
**By Brunello Rosa**



### From Traditional Conflicts to Technological Wars: How Technology Is Re-Shaping Warfare

Around three weeks ago, the Taliban troops regained control of Kabul, after having seized large parts of Afghanistan. The images of the Taliban entering the capital on top of dusty tanks have gone around the world for days. By using very traditional weapons, in a territory still seemingly controlled by the most sophisticated army in the world, the one from the United States, the insurgent group managed to become once again, 20 years after last time they were in power, the rulers of the central Asian country.

Even worse than that, the US have left behind, traditional weapons of all sorts, for billions of dollars. According to the US Government Accounting Office (GAO), the US army has left something like: 42,000 pick-up trucks and SUVs, 8,000 trucks, 22,000 Humvees, almost 900 armored vehicles (including 169 M113), 100 helicopters, 75 airplanes, 560,000 rifles, guns and machine guns and 176 pieces of artillery.

All these weapons will constitute the basis for the new Afghan army controlled by the Taliban. It is hard to imagine a peaceful use of all these weapons. In any case, the Afghan revolt was an example of a very traditional way of conducting wars: boots on the grounds, rifles, tanks, talks conducted somewhere else (in this case in Doha, Qatar).


But besides this old-fashioned warfare, a new, much more technologically advanced way of conduction wars is emerging. According [to a recent article](#), in the May 2021 conflict between Israel and the Palestinians, the Israeli army deployed AI and supercomputers to identify and strike targets in what has been labelled as the “first artificial intelligence (AI) war.” The Israel Defense Forces “used a swarm of AI-guided drones and supercomputing to comb through data and identify new targets within the Gaza Strip. It's thought this is the first time a swarm of AI drones has been used in combat.” [Supercomputers combed through a mountain of raw data](#) collected “using signal intelligence (SIGINT), visual intelligence (VISINT), human intelligence (HUMINT), geographical intelligence (GEOINT) and more” to be able to identify sensible targets to strike.


This type of hybrid war is likely to become the standard of conflicts in coming decades, whereby humans will be assisted, if not totally substituted, by robots, AI and other technological tools for military operations on the ground. But today, most conflicts are not even fought on the ground: the preferred battlefield for a number of organisations, whether governmental or non-governmental, is becoming the cyber space. In this environment, humans are always on the background, and the battle is fought by the machines, through algorithms and artificial intelligence.


[A recent report by the United Nations' Office of Counter Terrorism](#), titled “Algorithms And Terrorism: The Malicious Use Of Artificial Intelligence For Terrorist Purposes” discusses how “Terrorists have been observed to be early adopters of emerging technologies, which tend to be under-regulated and under-governed, and AI is no exception.” The study reports how “it is predicted that the global AI market will exceed USD 100 billion by 2025 and AI enabled systems will continue to support many sectors – healthcare, education, commerce, banking and financial services, critical infrastructure, and security, among many others.”


It is very likely that the wars of the future will be much more technological in nature, with a larger use of artificial intelligence and less boots on the ground, unless deemed absolutely necessary.

#### Our Recent Publications

 [ECB Flash Preview: Amid Higher Inflation, The Debate On QE Tapering Begins](#), by Brunello Rosa and Fawaz Sulaiman Al Mughrabi, 3 September 2021

 [2021-22 Oil Outlook: Supply Increases, As Global Demand Improves](#), by Fawaz Sulaiman Al Mughrabi, Karmen Meneses and Alessandro Magnoli Bocchi, 26 August 2021

 [Flash Review: RBNZ Postpones Its Rate Hike After The Government Suddenly Imposes A New Lockdown](#), by Brunello Rosa and Fawaz Al Mughrabi, 19 August 2021

 [Flash Preview: RBNZ Likely to Raise Rates in August, First Among G10 Central Banks](#), by Brunello Rosa and Karmen Meneses, 13 August 2021



Looking Ahead

**The Week Ahead: Confidence Expected To Weaken In the EZ and GDP Growth To Recover In Japan**

**In the EZ**, in September, the 'Economic Sentiment Index' is expected to fall to 30.0 (*p*: 42.7).

**In Japan**, final data for the GDP growth rate in Q2 is expected to rebound to 0.4% q-o-q (*p*: -0.9%).

**The Quarter Ahead: Global Factory Disruptions Lift Pressure On Prices; Selected CBs Plan Tightening Measures**

**Surging COVID-19 cases hamper Asian factories.** Factory activity faltered across Asia in August, with a resurgence in Covid-19 infections adding to global supply-chain disruptions and confirming fears of a slowdown in the region's economic recovery. Gauges of manufacturing activity plummeted across major Asian economies, in large part because: *i*) virus lockdowns; *ii*) port congestion; and *iii*) higher input costs hampered production. Also, data is likely to show signs that global demand for some Asian goods has been leveling off, as consumers rein in spending in the West.

**The Biden administration announced that it would offer boosters starting on September 20.** Moderna announced last week it had "completed" its submission of data to the FDA for authorization of boosters, as the US health regulators were seeking additional coronavirus booster shot data.

**UK proposal to rewrite section of Brexit deal wins lawyers' backing.** Prominent EU legal experts have backed the British government's demand to rewrite a controversial section of the Brexit withdrawal agreement that gives Brussels potentially sweeping powers over UK state-aid decisions. Expunging article 10 has long been a target of Brexiters in the Conservative party because it requires the UK government to refer for approval to the European Commission any state-subsidy decision that might have an impact on 'goods trade' between Northern Ireland and the EU.

**CBs to remain dovish.** The sharp slowdown in US jobs growth for August is expected to jeopardize the case for the US Fed to start reversing its easy-money policies at its next policy meeting. In the EZ, ECB policymakers meet this week in the shadow of the highest inflation rate of more than a decade. The inflationary burst has pushed a number of ECB rate-setters to suggest the ECB's debt purchases could be scaled back earlier than previously thought.

Last Week's Review

**Real Economy: Economic Activity Subdued, Hampered By Downside Risks; CBs Stay Dovish**

**In the US**, August's labor data showed: *i*) nonfarm payrolls rising by only 235k (*c*: 750k; *p*: 1,053k) – the lowest in 7 months; *ii*) average hourly earnings rising more-than-expected, by 4.3% y-o-y (*c*: 4.0%; *p*: 4.1%); and *iii*) the unemployment rate falling to 5.2% (*c*: 5.2%; *p*: 5.4%), despite reports of labor supply shortages and concerns over the lingering threat of the COVID-19 resurgence.

**In the EZ**, retail sales fell more-than-expected to 3.1% y-o-y (*c*: 4.8%; *p*: 5.4%), driven by a slowdown in demand for: *i*) non-food products; and *ii*) online trade.

**In Japan**, retail trade rose above expectations to 2.4% y-o-y (*c*: 2.1%; *p*: 0.1%), as consumption continues to strengthen amid an acceleration in COVID-19 vaccinations.

**In Chile**, the CB raised its key policy rate by 75bps to 1.50%, given stronger economic recovery prospects and mounting inflationary pressures.

**Financial Markets: Stocks Rise; Bond Yields Up; A Weaker USD Boosts Commodity Prices**

**Market drivers:** investor sentiment strengthened, supported by: *i*) slowing job growth in the US, as they are making the Fed less likely to begin tapering asset purchases later this year; and *ii*) US labor data.

**Global equities** rose w-o-w (MSCI ACWI, +1.3%, to 746). In the US, the S&P 500 Index continued to rally (+0.6% w-o-w to 4,535), as: *i*) the 'small-cap real estate sector' outperformed; while *ii*) the financial sector lagged. In the EZ, shares rose slightly (Eurostoxx 50, +0.3% to 4,202), as investors assessed signs of slowing economic momentum. In EMs, equities rose (MSCI EMs, +3.4%, to 1,316), as Chinese stocks gained for a second consecutive week (Shanghai Comp., +1.7%, to 3,582). Volatility was unchanged, and remained below historical averages (VIX S&P 500, +0.0 points to 16.4, 52w avg.: 21.6; 10y avg.: 17.4).

**Fixed Income:** w-o-w global bonds fell (BAML Global, -0.1% to 297.2) and UST yields rose (+2 bps, to 1.33%), after disappointing US payrolls number put in question the Fed's pledge to wind down bond purchases.

**FX:** w-o-w, the US Dollar Index lost ground (DXY, -0.7%, to 92.035; EUR/USD +0.8%, to 1.188), touching its lowest level in over a month, as growth in average hourly earnings was stronger-than-expected – raising concerns about inflationary pressures. In EMs, currencies gained against the USD (MSCI EM Currency Index, +0.9% to 1,742).

**Commodities:** Oil prices fell (Brent, -0.1% to 72.6 USD/b), as investors digest: *i*) the damage caused by hurricane Ida in the US Gulf of Mexico production; and *ii*) OPEC's output decision. Gold prices rose (+0.5% to 1,826 USD/Oz) reaching a two and a half month high, supported by a weaker USD.



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## Abbreviations, Acronyms and Definitions

a	Actual	LN	Northern League, Italy
AKP	Justice and Development Party, Turkey	MSS	Five Star Movement, Italy
ann.	annualized	m-o-m	Month-on-month
ARS	Argentinian Peso	mb	Million barrels
avg.	Average	mb/d	Million barrels per day
bn	Billion	MENA	Middle East and North Africa
BoC	Bank of Canada	MHP	Nationalist Movement Party, Turkey
BoE	Bank of England	mn	Million
BoJ	Bank of Japan	MPC	Monetary Policy Committee
bpd	Barrels per day	NAFTA	North-American Free Trade Agreement
bps	Basis points	NATO	North Atlantic Treaty Organization
BS	Balance sheet	OECD	Organization for Economic Cooperation and Development
c	Consensus	Opec	Organization of Petroleum Exporting Countries
C/A	Current account	p	Previous
CB	Central bank	P2P	Peer-to-peer
CBB	Central Bank of Bahrain	PBoC	People's Bank of China
CBK	Central Bank of Kuwait	PCE	Personal Consumption Expenditures
CBT	Central Bank of Turkey	PE	Price to earnings ratio
CDU	Christian Democratic Union, Germany	PM	Prime minister
CNY	Chinese Yuan	PMI	Purchasing managers' index
CPI	Consumer Price Index	pps	Percentage points
DJIA	Dow Jones Industrial Average Index	pw	Previous week
DJEM	Dow Jones Emerging Markets Index	QCB	Qatar Central Bank
d-o-d	Day-on-day	QAR	Qatari Riyal
DXY	US Dollar Index	QE	Quantitative easing
EC	European Commission	q-o-q	Quarter-on-quarter
ECB	European Central Bank	RE	Real estate
ECJ	European Court of Justice	RBA	Reserve Bank of Australia
EIA	US Energy Information Agency	RRR	Reserve Requirement Ratio
EM	Emerging Markets	RUB	Russian Rouble
EP	European Parliament	SWF	Sovereign Wealth Fund
EPS	Earnings per share	tn	Trillion
EU	European Union	TRY	Turkish Lira
EUR	Euro	UAE	United Arab Emirates
EZ	Eurozone	UK	United Kingdom
Fed	US Federal Reserve	US	United States
FOMC	US Federal Open Market Committee	USD	United States Dollar
FRB	US Federal Reserve Board	USD/b	USD per barrel
FX	Foreign exchange	UST	US Treasury bills/bonds
FY	Fiscal Year	VAT	Value added tax
GCC	Gulf Cooperation Council	VIX	Chicago Board Options Exchange Volatility Index
GBP	British pound	WTI	West Texas Intermediate
GDP	Gross domestic product	WTO	World Trade Organisation
IMF	International Monetary Fund	w	Week
INR	Indian Rupee	w-o-w	Week-on-week
IPO	Initial public offering	y	Year
IRR	Iranian Rial	y-o-y	Year-on-year
JPY	Japanese yen	y-t-d	Year-to-date
k	thousand	ZAR	South African Rand
KSA	Kingdom of Saudi Arabia	2y; 10y	2-year; 10-year



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