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IMF and Pakistan

Key Economic Issues and Challenges

Israel's Warning

Iran Must Wait for a Lethal Response

Disability Rights

A Comprehensive Overview

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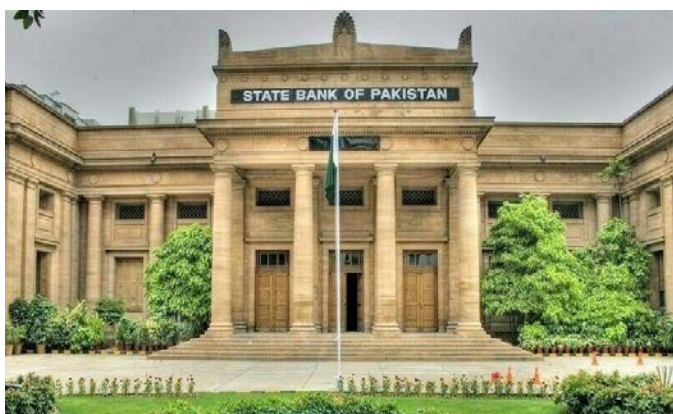
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SCO is a Beacon of Multilateralism, says PM Shehbaz Sharif

PM Shehbaz highlighted the significance of the SCO, describing it as representing “the collective voice of over 40 percent of the global population anchored in the Shanghai spirit.” He emphasized the shared commitment to collective security and cooperation for sustainable development in the region



By Javed Mahmood

Prime Minister Shehbaz Sharif hailed the Shanghai Cooperation Organisation (SCO) as a “beacon of multilateralism” while chairing the 23rd summit of its Council of the Heads of Government (CHG) in Islamabad.

The SCO includes China, India, Russia, Pakistan, Iran, Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan, and Belarus, with 16 more countries affiliated as observers or “dialogue partners.” Pakistan has been a full member since 2017 when former Prime Minister Nawaz Sharif attended the summit in Kazakhstan. Recently, Nawaz Sharif expressed hope for renewed ties with India.

As the current Chair of the CHG, PM Shehbaz presided over the summit held at the Jinnah Convention Centre in the capital. In his opening address, he warmly welcomed the attendees, saying, “It gives me immense pleasure to welcome our distinguished guests to Islamabad, the green and beautiful capital.”

PM Shehbaz highlighted the significance of the SCO, describing it as

representing “the collective voice and wishes of over 40 percent of the global population anchored in the Shanghai spirit.” He emphasized the shared commitment to collective security and cooperation for sustainable development in the region.

“This summit is a testament to the strength of our collaboration among diverse nations,” he said, noting the potential for the SCO to drive socio-economic progress, enhance regional peace, and improve the quality of life for citizens.

Calling for deeper collaboration, PM Shehbaz encouraged the leaders to use the summit as an opportunity to exchange ideas, share best practices, and forge action plans to benefit the region’s economies and societies. He expressed optimism about the “wonderful outcomes” that would emerge from their discussions.

In his subsequent remarks, PM Shehbaz underscored the pivotal moment in global history, with widespread transformations reshaping the political, economic, and security landscapes. He reiterated the SCO’s

role as a beacon of multilateralism, expressing confidence that the organization could shape a more prosperous, stable, and secure future for all its member states.

Reflecting on Pakistan’s chairmanship of the SCO CHG, PM Shehbaz reaffirmed the country’s commitment to regional peace, stability, and enhanced connectivity. He noted that Pakistan’s collaboration with the SCO had expanded academic and tourism linkages, promoted poverty alleviation, and empowered women and youth across the region. He also highlighted Pakistan’s efforts to enhance economic cooperation, focusing on trade promotion, the creative economy, and the SCO’s new economic dialogue programme. However, he emphasized the need for tangible action, calling for coordinated implementation and stronger cooperation in critical sectors like trade and the economy.

Turning to Afghanistan, PM Shehbaz described it as a unique opportunity for trade and transit that could benefit all SCO members but stressed the importance of stability in the country. He urged the international community to

provide urgent humanitarian support and called on the Afghan interim government to embrace political inclusivity to prevent Afghan soil from being used for terrorism against its neighbors.

Meanwhile, Prime Minister Shehbaz Sharif urged member states to work together to enhance regional security and stability.

"We are at a historic moment of transition, where sweeping transformations are reshaping the global, social, political, economic, and security landscape," he said during his keynote address at the 23rd meeting of the SCO Council of Heads of Government (CHG). This summit—one of the most significant international events held in Pakistan in years—took place at the Jinnah Convention Centre in Islamabad, with leaders from 10 countries attending, including India.

Presiding over the summit, PM Shehbaz emphasized the importance of multilateralism through the SCO, saying, "From the esteemed platform of the Shanghai Cooperation Organisation, I firmly believe we have not only the potential but the collective will to create a future that is more prosperous and secure for our people."

He further stressed that this future should be "inclusive and reflective of the shared aspirations of all member states," highlighting the SCO's role in fostering regional cooperation and peace.

PM Seeks expansion of China's BRI

Prime Minister Shehbaz Sharif called for the expansion of China's Belt and Road Initiative (BRI) while presiding over the Shanghai Cooperation Organisation (SCO) summit in Islamabad. The SCO includes China, India, Russia, Pakistan, Iran, Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan, and Belarus, with 16 additional countries affiliated as observers or dialogue partners. Pakistan became a full member of the SCO during the 2017 summit in Kazakhstan, attended by former PM Nawaz Sharif, who recently expressed hope for improved relations with India.

As Chair of the SCO's Council of the Heads of Government (CHG), PM Shehbaz was leading the summit in Islamabad. In his address, he advocated for expanding

flagship projects like China's Belt and Road Initiative, the China-Pakistan Economic Corridor (CPEC), now in its second phase, and the International North-South Transport Corridor. He urged member states to focus on developing road, rail, and digital infrastructure to strengthen regional connectivity.

"Let us not view such projects through a narrow political lens," he said, encouraging investment in collective connectivity to promote economic integration across the region. The prime minister emphasized that the SCO's connectivity framework should not only enhance regional trade but also support a vision for a connected Eurasia.



Shehbaz highlighted that economic collaboration is central to the SCO's mission and that investment in regional infrastructure is essential for advancing economic integration. He also called for the SCO to endorse a strategy for Energy Cooperation 2030 and the creation of an Association of Investors.

Addressing Poverty and Climate Change

In addition to economic topics, the prime minister addressed issues like poverty and climate change. He stressed that poverty is not just an economic concern but a "moral imperative" requiring collective action, noting that millions within the SCO region still live in poverty. Pakistan, as chair of the SCO's special working group on poverty, has facilitated seminars and webinars focused on alleviating poverty, and PM Shehbaz pledged continued efforts to address its root causes and improve quality of life across the region.

SCO Summit is a Big Achievement of Pakistan

Moreover, Foreign Office Spokesperson Mumtaz Zahra Baloch described hosting the Shanghai Cooperation Organisation (SCO) summit in Pakistan as a major foreign policy achievement. In an interview, Baloch highlighted the China-Pakistan Economic Corridor (CPEC) as a crucial initiative in strengthening regional connectivity.

She emphasized Pakistan's strong desire to continue efforts in this area, using platforms like the SCO to foster collaboration with Central Asian states on trade, energy, and

railway sectors, further boosting regional ties. Baloch also mentioned ongoing discussions with Türkiye to link road infrastructure with railways, a move aimed at enhancing transportation networks. The two-day 23rd meeting of the SCO's Council of the Heads of Government (CHG) began in Islamabad on Tuesday. Delegates from member and invited states arrived in the capital amid tight security measures.

SCO Member Nations Sign Eight Agreements

During the summit, eight important agreements were signed, addressing the SCO's budget, the functioning of its secretariat, and regional counterterrorism efforts. These agreements underscore the organization's commitment to collaboration in security, trade, and economic development.

Chaired by Pakistan's Prime Minister Shehbaz Sharif, the summit saw member states reaffirm their dedication to fostering

regional peace, political stability, and socio-economic cooperation.

Leaders also acknowledged the need for enhanced collaboration in science, technology, the digital economy, and information security.

Participants supported UN General Assembly resolutions aimed at promoting global peace and development. Held under tight security, the summit welcomed leaders and representatives from across the region, focusing on strengthening cooperation and trade.

Pakistan and China sign MoUs to boost mutual cooperation

A day ahead of the beginning of the 2-day Shinghai Cooperation Organization (SCO) Summit 2024 in Islamabad, Pakistan and China signed several MoU to boost their mutual cooperation. The two sides have finalized the minutes from the 13th meeting of the CPEC Joint Coordination Committee and the 7th Joint Working Group on Gwadar under the CPEC framework. On

October 14, Pakistan and China signed 13 agreements _ including security, education, agriculture, human resource development,

and science and technology. The signing took place following delegation-level talks between Prime Minister Shehbaz Sharif and Chinese Premier Li Qiang, where they discussed all facets of Pakistan-China relations, including economic and trade ties, as well as collaboration under the China-Pakistan Economic Corridor (CPEC). The signing ceremony was attended by both prime ministers and their respective delegations.

Prior to the signing ceremony, PM Shehbaz welcomed Premier Li at the PM House on October 14, where he was honored with a Guard of Honor. Among the agreements, a handing-over certificate for the Smart Classrooms Project was signed by Economic Affairs Minister Ahad Khan Cheema and Chinese Commerce Minister Wang Wentao. The two nations agreed to enhance collaboration in areas such as information and communication, water conservancy, flood control, and security, with relevant MoUs signed by Cheema and Luo. They also exchanged letters regarding "Human Resource Development under the GDI" and an "Assistance Program for Fire Fighting Vehicles for Islamabad."

Furthermore, an MoU was established for the joint support of laboratories, signed by Ministry of Science and Technology Secre-

tary Sajid Baloch and Chinese Ambassador Jiang Zaidong. An agreement for the co-production of TV programs was signed by Ministry of Information and Broadcasting Secretary Ambreen Jan and Ambassador Zaidong.

Launching of China-funded Gwadar Airport

Prime Minister Shehbaz Sharif and Chinese Premier Li Qiang virtually inaugurated in Islamabad the Gwadar International Airport, a key component of the multi-billion dollar CPEC project. During a ceremony held at the Prime Minister House, both leaders unveiled the plaque for the Gwadar airport, attended by members of their delegations, ministers, military officials, and senior government representatives.

"This landmark achievement underscores the time-tested friendship between our two countries," PM Shehbaz remarked at the inauguration. He expressed optimism that the completion of this international airport would significantly transform Gwadar's economy and contribute to Pakistan's overall economic development.

The Prime Minister highlighted the recent signing and exchange of MoUs between the





two nations across various sectors, including industry, commerce, and agriculture. “These MoUs will soon evolve into formal agreements through our joint efforts. I thank you for your visit to Pakistan amidst your busy schedule, which reflects your commitment to strengthening our friendship,” he said to the Chinese Premier.

Shehbaz also expressed gratitude to President Xi, Premier Li, and the people of China for their generous support in building the Gwadar International Airport, calling it “another feather in the cap of CPEC.” He assured his Chinese counterpart of his commitment to advancing the second phase of the CPEC and ensuring peace and security for both nations.

Meanwhile, in his address, Premier Li congratulated the Pakistani government and its people on the completion of the airport, emphasizing its significance for regional connectivity. He noted that the accomplishments achieved over the years

demonstrate the strength of the Pak-China friendship and would enhance shipping and port activities throughout the region.

Li described CPEC as a vital initiative contributing positively to Pakistan’s economic and social development and regional integration. He reaffirmed Beijing’s commitment to collaborating closely with Pakistan to pursue high standards, sustainability, and quality within the Belt and Road Initiative. Highlighting the special relationship between the two countries, Li termed their partnership “ironclad,” stating that it has withstood global changes. He expressed eagerness to work together to accelerate mutual economic development in the future.

Chinese PM Li Qiang’s crucial meeting with CJCS and Army Chief

Chinese Prime Minister Li Qiang held a significant meeting with Pakistan’s top

military leadership during his visit to Islamabad for the Shanghai Cooperation Organisation (SCO) summit. During the high-level discussions, Prime Minister Li met with the Chairman of the Joint Chiefs of Staff Committee and the heads of Pakistan’s armed forces. Both sides reaffirmed their commitment to deepening and expanding their strategic partnership, which has long been a foundation of regional stability. The talks covered several critical areas, including defense cooperation and counter-terrorism initiatives. Prime Minister Li commended Pakistan’s military for its crucial role in combating terrorism, acknowledging the sacrifices and accomplishments of the armed forces in promoting peace and security throughout the region.

Li also assured Pakistan Army of China’s ongoing support in its counter-terrorism efforts, stressing the importance of continued collaboration to address emerging security challenges.

Pakistan Saudi Arabia Relationship

By Aamir Latif

Pakistan has enjoyed warm relations with Saudi Arabia since the birth of the country in 1947. The relations are rooted in the centuries old religious, cultural and commercial links between the two peoples. The relationship is also based on shared Islamic ideals. Pakistan is the only state founded on Islamic identity while Saudi Arabia is the birth place of the Prophet (PBUH) and home to the two holiest sites of Islam. Quran and Sunnah play a significant role in the constitutional framework of the both countries.

A Treaty of Friendship was signed by the two countries as early as in 1951, laying the basis for cooperation. Bilateral relations were buttressed over the coming decades by a tradition of strong financial and strategic assistance extended to each other by the two brotherly countries whenever required.

Over the years, the two countries have also succeeded in developing a unique synergy for mutual development. Saudi Arabia is home to the largest number of Pakistani expatriates, approximately two million. Pakistani engineers, construction experts and labor have played a crucial role in building infrastructure in the modern Saudi Arabia. Similarly, Pakistani doctors, bankers, entrepreneurs, academics and financial experts played a premier role in developing institutional infrastructure of the Kingdom. In the process, the Kingdom has provided employment to Pakistanis ranging from high-tech urban professionals to unskilled laborers from the remotest parts of Pakistan. The large pool of Pakistani professionals and skilled and unskilled manpower is a great asset for the Kingdom.

Trade Relationship

The Minister stressed that Pak-Saudi political relationship will strengthen with strong economic cooperation. Citing the trade figure between both countries, which was 4.6 billion dollars in 2022, he said Pakistan is committed to increase it by collaborating with current Saudi leadership.

Pakistan and Saudi Arabia have reaffirmed



their commitment to strengthen bilateral cooperation for the mutual benefit of both nations in March.

This was the focus of a meeting between President Asif Ali Zardari and visiting Saudi Defense Minister Prince Khalid bin Salman, who met with Mr. Zardari at Aiwan-i-Sadr.

Prime Minister Shehbaz Sharif, Defense Minister Khawaja Asif, Chief of Army Staff Gen Asim Munir, and Saudi Ambassador to Pakistan Nawaf bin Said Al-Malki were also present at the meeting.

The Saudi defense minister later held separate meetings with Prime Minister Sharif and Gen Munir, and also attended the Pakistan Day Parade.

In welcoming the visiting dignitary, President Zardari emphasized the importance of Pakistan's relationship with Saudi Arabia, highlighting the fraternal bond shaped by shared faith and historical ties.

He stressed the necessity of enhancing bilateral cooperation across various sectors and expressed heartfelt gratitude to Saudi Arabia for its support during challenging times.

New Chapters to Strengthen the ties of both Nations

Prime Minister Shehbaz Sharif praised Saudi Arabia's investment of \$2.2 billion in Pakistan as the two countries signed several Memoranda of Understanding (MoUs) to boost bilateral trade and investment.

At a ceremony in Islamabad, PM Shehbaz, along with Saudi Investment Minister Khalid Bin Abdul Aziz Al Falih and Chief of Army Staff (COAS) General Syed Asim Munir, witnessed the exchange of signed MoUs.

This development follows the arrival of a high-level Saudi delegation, led by the kingdom's investment minister, on a three-day official visit to Pakistan.

During the ceremony, PM Shehbaz emphasized the importance of the visit, stating, "Crown Prince Mohammed bin Salman has a special interest in Pakistan's development." He expressed optimism that bilateral cooperation would continue to strengthen over time and assured that the government would take all necessary steps to implement the agreements.

“Economic relations and cooperation between Pakistan and Saudi Arabia will grow even further in the future. Our countries have enjoyed decades of brotherly relations,” the prime minister added, thanking Saudi Arabia for its consistent support.

He highlighted the significant role of the Saudi investment minister’s visit in advancing investment and economic ties, noting that Saudi Arabia has always supported Pakistan through challenging times.

The meeting was attended by Deputy Prime Minister Ishaq Dar, federal ministers, and other senior officials. PM Shehbaz also underscored the efforts of the Special Investment Facilitation Council (SIFC) in accelerating foreign investments.

Welcoming the Saudi delegation, PM Shehbaz discussed Pakistan’s privatization program and reiterated his commitment to removing any obstacles to smoothen the investment process between the two countries.

The signed agreements include a \$70 million investment in the agriculture sector, the establishment of advanced semiconductor chip manufacturing in Saudi Arabia, a textile industry, a white oil pipeline project, and MoUs exploring further investment opportunities. Additional projects cover a hybrid power initiative, transformer manufacturing facilities in both nations, cybersecurity measures for businesses, and the export of spices and vegetables from Pakistan.

Moreover, the agreements involve setting up manufacturing facilities for surgical and dental equipment and collaborating on Pakistan’s E-Taaleem and digitalization programs.

The prime minister also acknowledged Pakistan’s recent success in securing an International Monetary Fund (IMF) bailout package, expressing gratitude to the Saudi leadership for their support, which was crucial in securing the deal. He expressed hope that this would be the last IMF program as Pakistan has made significant economic progress.

“Thanks to teamwork, we’ve improved our economic indicators: inflation has dropped from 32% to 6.9%, the policy rate has decreased from 23% to 17.5%, and exports

and foreign remittances are on the rise,” PM Shehbaz stated.

The prime minister also extended his warm regards to King Salman bin Abdulaziz and Crown Prince Mohammed bin Salman, acknowledging their leadership and commitment to strengthening bilateral ties.

Reko Diq Acquisition

Saudi Arabia’s Investment Minister, Khalid Al-Falih, announced on Thursday that a significant partnership in Pakistan’s Reko Diq project is set to be finalized in the coming weeks.

The deal involves a collaboration between Saudi Arabia, Pakistan’s state-owned enterprises, and Barrick Gold, a Canadian mining company.

Reko Diq, one of the world’s largest undeveloped copper-gold deposits, is a highly coveted resource in Pakistan’s Balochistan province.

The project’s ownership structure is already established: Barrick Gold holds a 50% stake, while the remaining shares are distributed among several Pakistani stakeholders.

Pakistan’s federal state-owned enterprises control 25%, Balochistan owns 15% on a fully funded basis, and the province holds an additional 10% on a free carried basis, ensuring that Balochistan benefits from the project without having to contribute capital.

Al-Falih, speaking during a high-level event, emphasized the importance of this partnership not only in the context of mining but also for enhancing bilateral trade and investment ties between Saudi Arabia and Pakistan.

He expressed Saudi Arabia’s interest in exploring other sectors beyond mining, such as renewable energy, and emphasized that the kingdom is looking forward to deeper economic collaboration with Pakistan.

“We are not just talking about mining; this partnership represents the strength of our broader investment agenda in Pakistan,” Al-Falih said.

“Reko Diq is only one piece of the puzzle. We are also looking into renewable energy

projects and opportunities to strengthen trade and investment between our two nations.”

He went on to reveal that Saudi Arabia is gearing up for an extensive wave of construction and procurement projects in the coming years. “In the next few years, we will be awarding construction and material procurement contracts worth around \$1.8 trillion,” the minister said.

“The value of construction and exploration & production (E&P) procurement will reach about \$200 billion annually, year after year.”

This statement highlights the enormous economic ambitions of Saudi Arabia under its Vision 2030 plan, which aims to diversify the kingdom’s economy away from oil dependence by investing in industries like mining, renewable energy, and infrastructure development.

The Reko Diq venture is part of these larger ambitions, as Saudi Arabia seeks to expand its footprint in the global mining sector while securing critical minerals for its own industrial and economic development.

The Reko Diq project, situated in the mineral-rich region of Balochistan, has long been seen as a key component of Pakistan’s economic growth potential.

Once operational, the mine is expected to generate significant revenues for both Pakistan and its international partners, creating job opportunities and boosting the local economy.

The project’s development has faced various legal and regulatory hurdles over the years, but the new partnership marks a crucial step toward overcoming those challenges and realizing the mine’s full potential.

In conclusion, Saudi Arabia’s commitment to the Reko Diq project underscores its strategic interest in Pakistan and its natural resources, while also signifying a broader push to diversify its investments globally.

With a focus on mining, renewable energy, and trade, the partnership between Saudi Arabia and Pakistan is poised to yield substantial economic benefits for both nations in the years to come.

Al Aqsa Storm: One Year On; new scenarios unexplained



By Naqi Akbar

The Saturday morning, October 7, 2023 incursion of the elite units of Hamas, Al Qassam Brigades took everyone, the IDF and the IRGC equally by surprise. One year on, the two prime states involved in day-to-day combat with each other are faced with scenarios; unexplained scenarios, which they are leading into. If for the IDF, relentless air campaign has been the only answer to the Hamas courage, it also exposed that in the absence of any ground forces incursion and expertise, the air campaign can be dragged to many months without any tangible results.

For the Iranian regime; which build up its structure and narrative over the decades on the basis of offering to redrawing the map of the Middle East; for the obvious benefit of the Palestinian nation state, it was stretched to the limit; in the process exposing the serious fissures within the Iranian society and the nation state and not to ignore the talk of possibilities, never toyed before. The aggressive gestures by a variety of Iranian political diaspora that they have the chance and the stake in what they call a new Iran is alarming as it has the potential to create

scenarios which even the unprepared world will take time to adjust to.

Initially Iranian clerical establishment was at loss how to react to the Al Qassam Brigade impressive incursion into Israel. For obvious reason, the supreme leader was found on the TV lauding the courage; though the body language of the IRGC as well as Khamenei spoke of being 'caught unaware'. Despite the fact that the administration in power the Raeesi took radical steps; practically subletting its foreign minister Amir Abdollahian as the Hamas foreign office, the reluctance of the Iranian state to act and 'freeze' out for unexplained reasons, gradually emboldened the IDF and the IDF camp. Initially the Iranians regarded ground operation as Red Line, but did not react. It was only when the Embassy in Damascus was hit, they thought it over to react. Given the fact that Hezbollah was asked to go slow by the Iranians in coming to the rescue of Hamas, was misread that it was a free for all game for the IDF. Quietly the Hamas camp was clueless over the reasons of Iranian restraint.

The April retaliation by the radical elements of IRGC stunned the IDF and it was quick to retaliate. The sorriest part of the retaliation was that it made it looked like an accident and the Iranian nation state treating it as a threat termed it too an 'accident'.

The downing of the presidential helicopter near Tabriz, resulting in the demise of Raeesi and his foreign minister resulted in a sort of political earthquake for Iran. The snap polls, opened up flood gates for the Reform camp. Zarif, who was the original contender just days before the crash, took a back seat and supported a much compliant political figure like Masoud Phizishkian as the president of the republic.

It could not have been a more ominous inauguration of the reformist administration, more than the loss of Ismael Hania in Tehran through a joint effort of dissident Iranian moles as well as Mossad. It brought great embarrassment to the Iranian ideological state; yet it brought no signs of retaliation as has been the case during the Raeesi administration. The reform camp simply

slept over the issue and when the trio of President, Foreign minister and Zarif reached New York, they made all those noises which did not create an impression, that the Iranian nation state was trying to redraw the Middle East, rather it looked like they were just there to save their interests. That issue exposed fissures which only emboldened the IDF.

The revelations that the IDF strike mission has the precise location of the Prime Iranian asset in the war, Syed Hasan Nasrullah, minutes before being struck embarrassed the Iranian state to the point that it was again found to be 'frozen' into 'inaction'. There was a general consensus in the Iranian cyberspace and the street that if the Ismael Hania murder has been taken seriously, Iran could have avoided the loss of Nasrullah. For obvious reasons, the reformist administration looked the other side when the IRGC launched another volley of warheads towards the key IDF airbases. These so-called strikes already emboldened the IDF to witch hunt for the remaining Hezbollah leadership. The point reached where even the whereabouts of successor of Qasem Soleimani, Ismael Qani were not known, as if IDF was ruling the skies the Mossad seems to have infiltrated into the IRGC itself.

As there is a turn of events, Iran apologists might feel that arrest of Qani has much to do with the 'Zionist Propaganda', but the fact of matter seems to be that the Iranian state is deeply shaken from within, much to the benefit of the IDF. The resurgence of Muhammad Raza son as an option for yet another coup in Tehran are scary scenarios, which could not have been even imagined, however, the fact is that while the critical push could make the Americans and the IDF to literally pack up from Middle East, they have been given a new lease of life by the reformist camp in Iran.

The scenarios are too fluid to even engage one. The revolutionary nation state as created by Imam Khomeini and managed by the current leadership can take control the way it managed the devastation during the summers of 1981, when the revolutionary vanguard lost many in bombing campaigns by insurgents, as well as war with Iraq coupled with MeK insurgency where the scenarios, one could least wish for. The current detention of the IRGC assets is demonstrative of the control, the administration wants to take. The procurement of the Su-35 and other preparedness does shows that the damage control is in the process, however much more is needed to demonstrate.

As things stand in the case of Gaza and Palestine; the whole game seems to be in the Iranian camp failures as well as successes, if any. The Turkish and Saudi camp is not ready to make things bad with IDF or USA. The dissident Shia camp inclusive of anti-Hezbollah cleric in Arab world are ready to sing the IDF tune. The only ray of hope amongst the proverbial 'corpses of martyrs' is the will of the Hezbollah cadre to stand up again with active support from the radical element within Iran. That reformist camp damage to the ongoing Gaza needs to be undone in a big way. To take the readers to the summers of 1981, when the impeached President Banisadr was instrumental in stalemate in war with Iraq. It was not before the assertion of the leadership which corrected the war effort. Iranians need similar 'restart' to get to the ideals of its statehood. Conclusively, the next few months can be the make or break for the Palestinian issue and the only theocratic state itself. If the Iranians are able to recuperate from the current crisis of indecision, the Palestinian issue can reach its conclusion in the form of the 'one state solution'. The attrition is likely to intensify in the coming months. Micro and macro management as Tehran, Washington and Tel Aviv will decide, which party carries the day or the future.



Israel warns Iran of a lethal and stunning response



By J. Choudhry

Israel's defense minister issued a strong warning on Wednesday, stating that the country's response to a recent Iranian missile attack will be "lethal" and "surprising." Meanwhile, the Israeli military continues its large-scale operations in northern Gaza and a ground offensive in Lebanon targeting Hezbollah militants.

On the diplomatic front, Israeli Prime Minister Benjamin Netanyahu and U.S. President Joe Biden had their first conversation in seven weeks. According to the White House, the discussion covered Israel's potential response to Iran's attack. "It was direct, it was productive," said White House press secretary Karine Jean-Pierre of the 30-minute call. The Israeli offensive in northern Gaza has resulted in dozens of deaths and threatens to close three hospitals, according to Palestinian officials. This escalation comes amid Israel's continued war with Hamas, which began after Hamas launched an attack on southern Israel on October 7, 2023.

As Israel expands its weeklong ground offensive against Hezbollah in Lebanon, the country also contemplates a major retaliatory strike against Iran following an October 1 missile barrage. Israeli Defense Minister Yoav Gallant warned that Israel's strike on Iran would be "lethal, precise, and above all, surprising," adding, "Whoever strikes us will be harmed and pay a price."

Iran launched dozens of missiles at Israel

on October 1, which the United States helped to intercept. President Biden has expressed opposition to a retaliatory strike on Iran's nuclear sites.

Hezbollah has also continued its attacks, claiming responsibility for a rocket strike that killed two people in Kiryat Shmona, a northern Israeli town, on Wednesday. Heavy fighting in northern Gaza, particularly in the Jabaliya refugee camp, has left thousands trapped in their homes, with Israeli forces carrying out numerous operations. Gaza's Health Ministry reported at least 40 bodies recovered in recent days, with more likely under rubble.

In Gaza, residents fear Israel aims to depopulate the northern region and turn it into a military zone or settlement. Meanwhile, three hospitals in northern Gaza—Kamal Adwan, Awda, and the Indonesian Hospital—are almost inaccessible due to the fighting, and Israel has ordered them to evacuate. No humanitarian aid has entered northern Gaza since October 1, according to UN data.

Israel continues to target militants, stating that civilian casualties are a result of Hamas' tactics of fighting in residential areas. However, many in Gaza remain trapped, and fears of displacement are rising as Israel has blocked all roads except for one leading south from Jabaliya.

The war, which began with Hamas' attack over a year ago, has claimed the lives of over 42,000 Palestinians according to

Gaza's Health Ministry, with many civilians among the dead. Israeli Prime Minister Netanyahu has vowed to continue fighting until Hamas is defeated and all hostages are returned.

In Lebanon, Israeli Prime Minister Netanyahu warned that Lebanon could face the same fate as Gaza if its people do not oppose Hezbollah. Israeli forces have hoisted flags in southern Lebanese villages, signaling their expanding operations. Meanwhile, an Israeli strike on Wednesday killed four people and injured 10 at a hotel sheltering displaced people in southern Lebanon. Israel has launched a series of airstrikes in Lebanon, targeting Hezbollah positions, including the killing of Hezbollah leader Hassan Nasrallah and his top commanders.

Hezbollah has launched more than 12,000 rockets, missiles, and drones at Israel over the past year, according to Israeli military reports.

Iran attacked Israel with Ballistic Missiles

The Iranian military has begun launching ballistic missiles at Israel in response to a series of high-profile assassinations inside Iran and Lebanon. So far, Iran has reportedly fired 400 ballistic missiles at Israel, with launches originating from Isfahan, Tabriz, Khoramabad, Karaj, and Arak, according to a Tehran Times report. This decision for retaliation was made by Iran's

Supreme National Security Council (SNSC). The trigger for the escalation includes Israel's assassination of Palestinian Hamas leader Ismail Haniyeh in Tehran on July 31.

Earlier, in a major airstrike on Beirut, Lebanon, on September 27, Israel also killed Iranian Brigadier General Abbas Nilforoushan, who was serving as a military advisor in Lebanon, and Hezbollah leader Sayyed Hassan Nasrallah.

Meanwhile, Israelis rushed to shelters as alarms blared and explosions echoed in Jerusalem and the Jordan River Valley, following Iran's launch of a barrage of ballistic missiles in retaliation for Israel's operations against Hezbollah in Lebanon. Reports indicate that as many as 100 missiles were fired, with some intercepted over Jordan. In response to the missile threat, the Israeli military had earlier advised the public to take cover in safe rooms. The escalation comes after Israel conducted ground raids in Lebanon, marking the first significant military action there in 18 years, which has sparked fears of a broader regional conflict.

90% of the missiles hit their targets

"Despite the region being heavily protected by advanced defense systems, approximately 90% of our missiles successfully struck their targets, leaving the Zionists fearful of Iran's intelligence and operational abilities," the IRGC stated. Videos shared by Israeli settlers on social media depicted several missiles landing inside the occupied territories. In response, Israeli authorities quickly prohibited the sharing of footage showing the aftermath of the attacks once Iran's operation concluded.

Meanwhile, Iranian President Masoud Pezeshkian, in a post on X, asserted that Iran had exercised its "legitimate right" to retaliate against Israeli aggression following international law. "Netanyahu must understand that while Iran seeks no war, it will stand firmly against threats. What we've shown is only a fraction of our capabilities. Do not provoke Iran," he warned. Iran's mission to the UN echoed this sentiment, warning that any further Israeli acts of violence would provoke a "subsequent and crushing response."

Celebrations erupted across Iran following the missile strikes. In Tehran's Palestine Square, crowds expressed their gratitude, chanting "Thank you" in praise of the Leader of the Islamic Revolution and military officials. Similar scenes of jubilation unfolded across the Muslim world, with citizens in Yemen, Lebanon, Jordan, Iraq, Syria, and Gaza voicing their support and appreciation for Iran's actions. Resistance groups such as Hamas, Ansarullah, Hezbollah, and Iraq's popular forces issued statements commending Iran for the successful execution of Operation True Promise II.

Meanwhile, in Israel, reports indicated that senior officials, including Prime Minister Benjamin Netanyahu, sought shelter in underground bunkers shortly after the attacks began. An Israeli military spokesperson revealed that U.S. forces had assisted in intercepting some of the Iranian missiles, though he did not specify the exact number of projectiles intercepted. After the last missile strike, both Tel Aviv and Washington had claimed to have downed "90%" of Iran's missiles and drones.

Following the strikes, U.S. President Joe Biden abruptly adjusted his schedule to meet with Vice President Kamala Harris in the Situation Room. White House National Security Advisor Jake Sullivan later stated in a press briefing that the U.S. had coordinated with Israel's air defense systems during the attack, claiming that Iran's assault "appears to have been repelled." Sullivan added that the U.S. is in discussions with Israel regarding a potential response. At the same time, Israeli officials signaled their intent to launch heavy retaliatory strikes across West Asia in the coming days.

The Islamic Revolutionary Guard Corps (IRGC) launched a large-scale missile attack on Israeli positions in the occupied territories on Tuesday, in retaliation for a series of attacks by the Israeli regime that killed key figures including Hamas leader Ismail Haniyeh, Hezbollah chief Sayyad Hassan Nasrallah, and IRGC commander Brigadier General Abbas Nilforooshan.

The IRGC released two statements within a few hours of each other. The first confirmed reports of missile strikes targeting Israeli positions, while the second announced that three military bases near Tel Aviv were hit.

This marked the second instance of Iran launching missiles at the occupied territories from its own soil. The attack, named Operation True Promise II, follows a similar strike during Operation True Promise in mid-April, where Tehran targeted military sites after Israel attacked Iran's embassy in Damascus.

In its first strike, the IRGC deployed approximately 300 older drones and a few ballistic missiles. However, the second operation involved a more advanced arsenal, including the use of hypersonic missiles, marking their first deployment since Iran publicly announced possessing such technology. Both IRIB news and statements from the Israeli military confirmed the use of these advanced weapons.

IRGC chief issues a stern warning to Israel

Meanwhile, Iran's Chief of Staff, Major General Mohammad Bagheri, has issued a stern warning, stating that Iran will target Israel's critical infrastructure if its territory comes under attack. This declaration follows a missile barrage launched by Iran, in which approximately 200 rockets were fired at Israel, as reported by AFP. Speaking on state television, Bagheri emphasized that any future strikes against Israel will escalate in both intensity and scale.

"The attack will be repeated with greater force, and all the infrastructure of the regime will be targeted," he stated during the broadcast, underscoring Tehran's readiness for further military action if provoked.

The missile attack highlights the deepening tensions between the two regional rivals, who have a long history of hostilities. Iran, a staunch opponent of Israel, has frequently condemned Israel's policies in the region, while Israel has continuously expressed concerns over Iran's influence in the Middle East, particularly regarding its support for militant groups like Hezbollah.

As the situation in the region becomes increasingly volatile, both sides appear poised for further confrontation. The escalation of rhetoric from Tehran signals Iran's willingness to respond aggressively if it perceives any direct threats to its sovereignty.

One Year of Gaza Genocide: Israel's military committed the gravest crimes against humanity, says Deputy PM Ishaq Dar

Israel has continued its brutal offensive on the Gaza Strip following an attack by the Palestinian group Hamas last Oct. 7, despite a UN Security Council resolution calling for an immediate cease-fire



By Aamir Latif

KARACHI: Israel's genocidal military aggression in Gaza constitutes the "gravest" crimes against humanity committed since World War II, observes Pakistan's Foreign Minister Ishaq Dar. In an exclusive interview with Anadolu on the first anniversary of Israel's onslaught on the Gaza Strip, Dar said Israeli forces have expanded the conflict and committed "unacceptable" violations of the sovereignty of Lebanon, Syria, and Yemen, relentlessly targeting civilian population centers, including hospitals and schools, and undermining their stability and security.

"It is indeed very unfortunate that we are living in the wake of the gravest crimes against humanity committed since the Second World War," Dar, who also serves as Pakistan's deputy prime minister, said.

The prevailing culture of impunity and disregard for international law must be addressed urgently, the top Pakistani diplomat said, urging the international

community to take swift action to de-escalate the rapidly deteriorating situation. Despite international warnings that the Middle East region was on the brink of a regional war amid Israel's relentless attacks on Gaza and Lebanon, Tel Aviv expanded the conflict by launching on Oct. 1 a ground invasion into southern Lebanon.

"The people of Palestine, Lebanon, and the surrounding regions deserve a life free of fear and violence. It is crucial for all sides to step back from the brink and for the international community to take swift action to de-escalate the situation," he went on to say.

Israel has continued its brutal offensive on the Gaza Strip following an attack by the Palestinian group Hamas last Oct. 7, despite a UN Security Council resolution calling for an immediate cease-fire.

Nearly 42,000 people have since been killed, mostly women and children, and

over 97,100 others injured, according to local health authorities.

The Israeli onslaught has displaced almost the entire population of the territory amid an ongoing blockade that has led to severe shortages of food, clean water, and medicine.

Israel faces a genocide case at the International Court of Justice (ICJ) for its actions in Gaza.

Islamabad demands 'full' and 'effective' implementation of ICJ's ruling

Islamabad demands "full" and "effective" implementation of the ICJ ruling, which is a significant milestone in the pursuit of justice for the Palestinian people and international accountability of Israel, said Dar.

Pakistan is among several countries that have supported the application filed by South Africa to the ICJ against Tel Aviv under the 1948 Genocide Convention.

“Pakistan calls for the full and effective implementation of the ICJ’s decision so that basic human rights, dignity and identity of Palestinian people as a distinct group are upheld and protected, as stipulated by the UN Charter, relevant UN Security Council resolutions, and international law,” Dar added.

He stressed the UN Security Council to play its role in putting an end to Israel’s ongoing brutal military campaign in Gaza, allowing the unhindered flow of humanitarian aid, taking effective measures to protect civilians in the besieged enclave, and holding Israel accountable for its crimes, as stipulated by the ICJ ruling.

To a question about the Muslim world’s overall response to Israeli actions, particularly the Organization of Islamic Cooperation (OIC), which has 48 Muslim-majority countries in 57 member states, Dar responded: “There is a consensus in the OIC on this issue. The OIC categorically condemns the brutal aggression against the Palestinian people and holds Israel fully responsible for the repercussions of continuing this aggression.”

The OIC, he further said, has repeatedly called on the international community to intervene urgently and force Israel to stop its ongoing “adventurism” in the Middle East.

“A group of Foreign Ministers of OIC countries is actively working towards this end. They have visited all major capitals and have been successful in rallying support for the Palestinian cause,” he added.

Pakistan welcomes Erdogan’s call for a special OIC Summit on Palestine

Dar said Pakistan “appreciates and welcomes” Turkish President Recep Tayyip Erdogan’s call for a special OIC summit on Palestine.

“President Erdogan in his capacity as well as the representative of the sentiments of

the people of Türkiye, has always been very active in bringing the plight of Palestinians to the fore,” he said.

“We will stand by any such initiative and will provide any support needed to this effect, from the platform of OIC,” he asserted.

Israel repeatedly attacked UN Peacekeepers in Lebanon

UN peacekeepers in Lebanon reported that Israeli fire targeted their headquarters in the southern town of Naqura, injuring two Blue Helmets. The UN mission accused Israel of “repeatedly” striking their positions.



“Earlier today, two peacekeepers were injured when an IDF Merkava tank fired at an observation tower at UNIFIL’s headquarters, hitting it directly and causing the peacekeepers to fall,” the mission said, referring to the Israeli military.

UNIFIL peacekeepers have been stationed in southern Lebanon since 2006 under a UN Security Council mandate to support regional stability. Any intentional attack on peacekeepers is a serious violation of international humanitarian law and Security Council resolution 1701.

Global Reactions to Israel’s Attack

Türkiye

Türkiye condemned Israel’s attack on the UN force, following what it described as “massacres of civilians” in Gaza, the West Bank, and Lebanon. The Turkish Foreign

Ministry emphasized the need for the international community to hold Israel accountable for its violations of international law. Türkiye contributes to UNIFIL’s Maritime Task Force with a corvette/frigate and personnel at the UN headquarters.

European Union

EU foreign policy chief Josep Borrell denounced the attack as “inadmissible” and without justification, stating that Israel had crossed a dangerous line. He reiterated the EU’s full support for UNIFIL and its Security Council-mandated mission.

Finland

Finnish Prime Minister Petteri Orpo condemned the attack as “highly condemnable” and called for a full

investigation into the incident, emphasizing the seriousness of the situation.

Italy

The Italian government summoned Israel’s ambassador to Rome, formally protesting the attack on UN troops. Italy, which has made significant contributions to regional stability under the UN mandate, called the attack “unacceptable” and urged for de-escalation in the region.

Netherlands

Dutch Prime Minister Dick Schoof expressed deep concern over the escalating violence and urged for an immediate ceasefire in Lebanon. He stressed the need for a diplomatic solution and full implementation of UN resolutions, including the disarmament of armed groups like Hezbollah, while calling for an end to Hezbollah’s attacks on Israel.

Spain

Spain condemned Israel's actions, demanding respect for UNIFIL troops and their safety. The Spanish Foreign Ministry stated that attacks on peacekeeping operations are grave violations of international law and Security Council resolution 1701.

Ireland

Ireland's Prime Minister expressed deep concern over the reports, stating that firing on peacekeepers is unacceptable and intolerable. He emphasized the sanctity of the Blue Helmets worn by UN peacekeepers and called for accountability.

UN Probe finds Israel guilty of destroyed Gaza Healthcare System

A United Nations investigation has concluded that Israel implemented a systematic policy aimed at dismantling Gaza's healthcare system during the Gaza war. These actions are characterized as war crimes and potentially rise to the level of crimes against humanity, including extermination. Former UN High Commissioner for Human Rights Navi Pillay, in a statement before the release of a full report, accused Israel of "persistent and deliberate assaults on medical personnel and facilities" during the war, which followed

an attack by Palestinian group Hamas on southern Israel on October 7, 2023.

"Children have been the most affected by these assaults, both directly and indirectly, due to the collapse of Gaza's healthcare infrastructure," Pillay stated. The full report will be presented to the UN General Assembly on October 30.

Israel argues that Gaza's militants hide among civilian infrastructure, including homes, schools, and hospitals, and that they target these fighters wherever they are located. Hamas denies using civilians as shields or hiding weaponry and command centers among non-combatants.

The UN inquiry also accuses Israeli forces of the intentional killing and torture of medical staff, the targeting of ambulances, and blocking permits for patients in Gaza to seek care outside the besieged enclave.

As an example, the inquiry noted the case of Hind Rajab, a young Palestinian girl who, along with her family and two medics attempting to rescue her, was killed by Israeli fire in February.

Widespread Civilian Casualties

According to the World Health Organization, over 10,000 critically ill patients have

been unable to leave Gaza for medical care since the Rafah border crossing with Egypt was closed in May. The Palestinian health ministry reports nearly 1,000 medical workers have been killed in the past year, which the WHO called "an irreplaceable loss and a devastating blow to the health system."

The UN's Commission of Inquiry (COI) has a broad mandate to gather evidence and identify those responsible for international crimes in Israel and the occupied Palestinian territories, relying on victim testimonies, submissions, and satellite imagery.

The COI previously alleged that Israel committed war crimes at the beginning of the Gaza war, and that Israel's actions also amount to crimes against humanity due to the high number of civilian casualties. Crimes against humanity are defined as the most severe international crimes, perpetrated as part of a widespread or systematic attack on civilians. Israel has not cooperated with the investigation, claiming the inquiry is biased against it. The COI has accused Israel of obstructing its work, preventing investigators from accessing both Israeli and Palestinian territories. Evidence collected by UN-mandated bodies like this one has, in some cases, been used as a basis for war crimes prosecutions, potentially by the International Criminal Court.



Earthquakes in Iran and Israel Spark Theories of Covert Nuclear Testing amid Heightened Regional Tensions



By Romana Afsheen

The Middle East has been rattled both literally and figuratively after a series of seismic events struck Iran and Israel on October 5, 2024. While the two moderate earthquakes that occurred in rapid succession could be attributed to natural causes, the unique timing and the geopolitical tension between the nations have spurred speculation regarding possible covert nuclear testing.

The initial earthquake, with a magnitude of 4.6, had its epicenter near Aradan, Semnan Province, Iran, at a shallow depth of 10 kilometers. The tremor was felt as far as Tehran, which is about 110 kilometers from the epicenter. Just hours later, a weaker quake was reported in Israel. Social media was quickly flooded with theories, with some users speculating that Iran had conducted an underground nuclear test. Rumors and speculation have only added to the air of uncertainty that already prevails in the region.

Iran's Military Response to Israeli Actions

The recent earthquakes come on the heels of significant escalations in the region. On October 1, Iran launched a barrage of ballistic missiles into Israel. The launches originated from several Iranian cities, including Isfahan, Tabriz, and Arak, targeting military installations across Israel. The Supreme National Security Council (SNSC) of Iran reportedly sanctioned this operation following a series of high-profile assassinations, including that of Palestinian Hamas leader Ismail Haniyeh, Hezbollah leader Hassan Nasrallah, and Iranian Brigadier General Abbas Nilforoushan. These figures had strong ties to Iran, and their assassinations were seen as deliberate provocations.

The missile strikes, dubbed Operation True Promise II, involved approximately 400

ballistic missiles and included advanced weaponry such as hypersonic missiles. In response, Israeli Prime Minister Benjamin Netanyahu and other senior officials took shelter in underground bunkers. Alarms blared in cities such as Jerusalem and the Jordan River Valley, where explosions resonated as Israel's air defense systems intercepted a portion of the incoming missiles. Reports indicate that U.S. forces provided support to Israel, intercepting some missiles and helping to mitigate the damage.

Social Media Reactions and Conspiracy Theories

Social media has become a breeding ground for conspiracy theories surrounding these earthquakes. A user on the platform X claimed that the earthquake in Iran was the result of a nuclear test, which allegedly took place underground to minimize radiation

exposure. Another user noted that the quake was reminiscent of the 2013 North Korean nuclear test, which also triggered seismic activity. Rumors of a covert nuclear test have spread rapidly, with some suggesting that this may have been a demonstration of Iran's nuclear capabilities.

Although these claims remain unverified, they reflect the public's fear and mistrust surrounding Iran's nuclear ambitions. While Iran has long denied pursuing nuclear weapons, its significant investment in nuclear technology has raised suspicions globally. Nuclear experts have pointed out that an underground nuclear test of this nature is unlikely to produce a moderate earthquake without causing additional surface disruptions. However, the ongoing

The prospect of further Israeli action has led Iranian leaders to issue warnings, threatening retaliation if Israel strikes back. Iran's Chief of Staff, Major General Mohammad Bagheri, stated that future attacks would target critical Israeli infrastructure. He emphasized that Iran's missile arsenal, which now includes hypersonic weapons, poses a substantial threat to Israeli defenses. This threat underscores the volatile nature of the conflict, as both sides appear ready to engage in a protracted and potentially devastating confrontation.

The Broader Implications of Regional Tensions

The rising hostility between Iran and Israel has far-reaching implications for the

Nuclear Testing Speculations and the Global Perspective

The earthquake speculation has highlighted the broader concerns regarding nuclear proliferation in the Middle East. Iran's nuclear ambitions have long been a point of contention, not only for Israel but also for the international community. The possibility of a nuclear-armed Iran raises significant security concerns, particularly given its influence over various militant groups in the region.

Experts in nuclear policy have noted that while it is unlikely that the recent earthquakes were caused by nuclear testing, the concerns underscore the need for renewed diplomatic efforts. The 2015 Joint Comprehensive Plan of Action (JCPOA), which sought to limit Iran's nuclear capabilities in exchange for sanctions relief, has effectively fallen apart since the U.S. withdrawal in 2018. Efforts to revive the deal have stalled, and Iran has since ramped up its uranium enrichment, bringing it closer to the threshold needed to produce a nuclear weapon.

Moving Forward: Diplomacy or Further Conflict?

The recent events demonstrate the fragile state of affairs between Iran and Israel. While both sides are deeply entrenched in their positions, there remains a glimmer of hope for diplomatic solutions. Many experts argue that returning to negotiations could help de-escalate tensions and prevent a broader conflict. However, the reality on the ground suggests that both Iran and Israel are preparing for the possibility of further military engagement.

The situation in the Middle East remains highly fluid, with the potential for rapid developments. As Iran and Israel continue to exchange threats, the international community watches with bated breath, aware that any misstep could have catastrophic consequences. The recent earthquakes may or may not be linked to covert nuclear testing, but they serve as a stark reminder of the volatility that defines the region.



regional turmoil lends itself to such speculations, as both Iran and Israel have histories of covert operations against each other.

Israel's Response and Potential Retaliation

In the wake of the missile strikes, Israel's government has signaled its intent to launch a heavy retaliatory response. Military sources in Israel suggest that they are preparing to escalate their operations against Iran and its allies in the region. Senior Israeli officials have consulted with their U.S. counterparts, coordinating defensive measures and discussing potential responses. President Joe Biden's administration has indicated strong support for Israel, with National Security Advisor Jake Sullivan emphasizing the U.S. commitment to the security of its ally.

Middle East. Iran's missile strikes and the subsequent earthquakes have stoked fears that the situation could spiral into a larger regional conflict. The involvement of Hezbollah, Hamas, and other militant groups, all of whom have expressed support for Iran's actions, adds another layer of complexity. Iran's allies in Yemen, Lebanon, and Iraq have praised the missile strikes, and demonstrations in support of Iran have erupted across the Muslim world.

For Israel, the conflict with Iran represents an ongoing existential threat. While Israel has developed one of the most sophisticated missile defense systems globally, the intensity and sophistication of Iran's recent missile strikes have highlighted the challenges it faces. With the potential for further escalations on the horizon, Israel may find itself increasingly reliant on U.S. support to bolster its defenses.

In conclusion, the seismic events in Iran and Israel have stirred widespread speculation and underscored the ongoing tensions between these two nations. While it remains unclear whether these quakes were natural, the situation highlights the urgent need for diplomatic intervention. As both countries continue to amass military capabilities, the risks of escalation are real, and the path forward remains uncertain. The world will be watching closely as Iran and Israel navigate this precarious moment in their long-standing conflict.

Iranian attack event did not scratch Israeli Air Force, says Gallant

Defense Minister Yoav Gallant stated on Sunday that last week's Iranian ballistic missile attack "didn't even scratch" the capabilities of the Israeli Air Force and assured that Israel would not be deterred from responding to such provocations.

During a visit to Nevatim Airbase, which sustained some damage in the attack, Gallant emphasized that Israel would decide when and how to respond, calling this not just a statement of intent but an actionable plan, according to his office.

"The Iranians have not even scratched the capabilities of the Air Force. Not a single squadron, plane, or runway has been compromised. Our operational continuity remains intact," Gallant told pilots, aircrews, and ground personnel.

The approximately 180 ballistic missiles launched by Iran on Tuesday caused some damage, including at Israeli airbases. However, the military confirmed that no aircraft or critical infrastructure were hit, and the Air Force continues to operate at full capacity.

While most of the missiles were intercepted by air defenses or landed in open areas, the attack sent 10 million Israelis into shelters and caused damage to civilian buildings, including a school.

"Anyone who thinks that attacking Israel will deter us from responding should look at Gaza and Beirut — the situation is clear," Gallant said, referring to ongoing military operations in Gaza and airstrikes on Hezbollah targets in Beirut.

"We are strong both defensively and offensively, and we will demonstrate that strength at the time and place of our choosing. This is not just a declaration, but a work plan," Gallant stated.

His comments came a day after Prime Minister Benjamin Netanyahu affirmed that Israel has a "duty and a right" to respond to Iran's assault.

Biden opposes Israeli attack on Iranian oil sites

On Friday, U.S. President Joe Biden stated that Israel has not yet decided on how to respond to Iran's recent ballistic missile attack. Still, he advised against targeting Iranian oil facilities.

surge in oil prices due to concerns over global supply disruptions.

"I think — I think that would be a little — anyway," Biden said at the time, before noting that Israel would ultimately make its own decisions on how to respond to the missile strike. When asked if he had urged Israel not to target Iran's oil infrastructure, Biden added, "I know not to negotiate in public."

Despite Biden's comments, Israeli media suggested that any Israeli response is being closely coordinated with Washington.

The Iranian missile barrage, which targeted Israel earlier this week, came as Israel continued its campaign against Hezbollah, Iran's proxy in Lebanon. Iran claimed the attack was retaliation for Israel's killing of



"If I were in their position, I'd be considering alternatives to striking oil fields," Biden remarked during a rare appearance at the White House daily press briefing.

Earlier in the week, Biden had also expressed his opposition to Israel potentially targeting Iran's nuclear sites.

His latest comments followed a statement the previous day, where he mentioned that an Israeli strike on Iranian oil sites was "under discussion," a comment that led to a

Hezbollah leader Hassan Nasrallah, a senior IRGC general, and the alleged assassination of Hamas leader Ismail Haniyeh in Tehran in July.

The strike forced millions of Israelis into bomb shelters. It caused minor damage to Israeli air bases, with one Palestinian in the West Bank killed by shrapnel and two Israelis injured. However, the Israel Defense Forces described the impact as "ineffective."

Kamala Harris skirts question on whether Netanyahu is a close ally of USA



By J. Choudhry

US Vice President Kamala Harris avoided directly addressing whether Israeli Prime Minister Benjamin Netanyahu should be considered a “close ally” of the United States amid criticisms that Netanyahu has hindered Washington’s efforts to promote de-escalation in the Middle East.

In a preview of her interview with CBS News’s 60 Minutes, released on Sunday, Harris was asked about the US’s efforts to convince Israel, a key ally, to halt its military operations in Gaza and stop attacks on Lebanon.

Harris, who is also the Democratic candidate in the upcoming presidential election, emphasized that the US has been applying pressure on both Israel and regional Arab leaders to secure a ceasefire in Gaza and that these efforts have led to “movements” by Israel. However, she did not elaborate on specifics.

When pressed about whether the US has a “real, close ally” in Netanyahu, Harris responded: “I think, with all due respect,

the better question is, do we have an important alliance between the American people and the Israeli people? And the answer to that question is ‘yes’.”

The exchange underscores the Biden administration’s continued refusal to shift its strong support for Netanyahu’s government, even as Israeli military operations in Gaza and Lebanon escalate.

For months, critics have accused Netanyahu of obstructing a potential ceasefire in Gaza to further his political agenda. Analysts have warned that Washington’s reluctance to pressure Israel could contribute to a wider regional conflict, with some rights groups calling for the US to impose an arms embargo on Israel. The US provides Israel with at least \$3.8 billion in military aid annually, and since the start of the Gaza war in October of last year, President Biden has approved an additional \$14 billion in assistance for Israel.

Earlier, she said the relationship between the American and Israeli people holds more

weight than personal ties with Israeli Prime Minister Benjamin Netanyahu. Speaking in a pre-released segment of an interview with US news outlet CBS’ 60 Minutes program set to air on Monday, Democratic presidential candidate Harris suggested that US support for Israel stems from principles rather than individual relationships.

She addressed recent disagreements over US calls for a cease-fire in Lebanon, saying that Washington backs Israel’s right to defend itself against groups like Hamas and Hezbollah.

Harris also said that Israel has taken some steps under US pressure, suggesting diplomatic influence remains strong despite disagreements. Netanyahu is said to favor former President Donald Trump, Harris’ rival, to return to the White House, believing he would not even express token opposition to Israel’s escalating war.

Harris said the US seeks to boost humanitarian aid, secure the release of prisoners, and work towards a cease-fire, adding that

diplomatic pressure will continue on both Israel and other regional actors. When asked if Netanyahu is a close friend, Harris shifted the focus, stating that the alliance between the people of both nations is far more important.

Harris has been under pressure from many members of her party – especially younger Democrats and those with Middle Eastern roots, frustrated by what they see as President Joe Biden's failure to stand up to Israel – to take a stronger stance for Palestine and against Israel's year-long war on Gaza, killing some 42,000 people and injuring nearly 97,000 others.

Harris Lambasts Trump for his friendly ties with Russian President Putin

During a TV appearance on Tuesday, Vice President Kamala Harris criticized her Republican opponent, Donald Trump, for his controversial ties with Russian President Vladimir Putin.

Citing Bob Woodward's upcoming book, *War*, which alleges that Trump sent rare COVID-19 test kits to Putin as the pandemic began, Harris expressed her anger. Speaking with Stephen Colbert, she recalled the early pandemic struggles, saying: "Do you remember how many people were scrambling for tests? And this

man is sending COVID test kits to Vladimir Putin? Think about that, on top of him sending love letters to [North Korean leader] Kim Jong-un. What about the American people? They should be your first priority."

Harris pointed to Trump's actions during the chaotic early days of the pandemic, accusing him of putting foreign leaders ahead of American citizens by sending crucial COVID-19 supplies to Russia. She also questioned his favorable stance toward Kim Jong-un, stating that Trump neglected the needs of Americans, who should have come first.

She then shifted to the impact of Trump's presidency on the U.S. economy, telling Colbert, "People at my rallies — which, by the way, attract quite a few people — say, 'You lost jobs, manufacturing, automotive plants, and the election. What does that make you? A loser.' I thought that was funny."

Harris labeled Trump a "loser" for failing to protect jobs, manufacturing, and for ultimately losing the 2020 election, also poking fun at the smaller crowds at his rallies.

In response, a Republican spokesperson dismissed the claims in Bob Woodward's book as baseless and "made-up stories."

Additionally, Harris mentioned that a ceasefire agreement in the ongoing Hamas-Israel conflict is in progress, and expressed confidence that the U.S. will eventually

Meanwhile, US Vice President Kamala Harris condemned Iran's "reckless and brazen" missile attack against Israel "unequivocally."

"I'm clear-eyed Iran is a destabilizing, dangerous force in the Middle East," Harris told reporters Tuesday after Iran fired around 180 ballistic missiles at Israel.

The Democratic presidential candidate said she fully supports President Joe Biden's order for the US military to shoot down Iranian missiles targeting Israel. The Pentagon said earlier that US Navy destroyers deployed to the Middle East supported the defense of Israel by firing approximately a dozen interceptors against the incoming Iranian missiles.

"As I have said, I will always ensure Israel can defend itself against Iran and Iran-backed terrorist militias. My commitment to the security of Israel is unwavering," Harris said.

Stressing that Iran is not only a threat to Israel but also to American personnel in the region, she added that the US will "never hesitate to take whatever action is necessary



to defend US forces and interests against Iran and Iran-backed terrorists." Tensions are running high in the Middle East following the Iranian missile attack on Israel late Tuesday. Israel said Iran had launched around 180 missiles in retaliation for the assassination of Hamas political leader Ismail Haniyeh and Hezbollah leader Hassan Nasrallah.

Vice President and Democratic presidential candidate Kamala Harris said Washington will continue to pressure Israel and other players in the Middle East to reach a ceasefire deal in Gaza even as advocates say that the United States has not thus far used its leverage over its ally.



Harris sidestepped a question in the interview on whether Israeli Prime Minister Benjamin Netanyahu was a "real close ally."

"I think with all due respect the better question is do we have an important alliance between the American people and the Israeli people and the answer to that question is yes," Harris said.

Harris reiterated Washington's position to support Israel's right to self-defense against Iran and Iran-backed militant groups like Palestinian Hamas and Lebanese Hezbollah.

"Now the work that we do diplomatically with the leadership of Israel is an ongoing pursuit around making clear our principles," Harris said.

"We're not going to stop in terms of putting that pressure on Israel and in the region

including Arab leaders," Harris said. Washington's occasional condemnation of Israel over the war's civilian death toll has mostly been verbal with no substantive change in policy.

Advocates say Washington has not put pressure on its ally by refusing to put an arms embargo that anti-war protesters around the United States and the world have demanded for months. Protests were also held over the weekend. President Joe Biden laid out a three-phase ceasefire plan for Gaza on May 31 but a deal between Israel and Hamas has not been reached due to gaps in exchanges of Israeli hostages and Palestinian prisoners, and Israel's demand

that it maintain a presence in a corridor on the southern edge of the Gaza Strip bordering Egypt.

The latest bloodshed in the decades-old Israeli-Palestinian conflict was triggered on Oct. 7, 2023, when Hamas attacked Israel, killing 1,200 and taking about 250 hostages, according to Israeli tallies.

Israel's subsequent military assault on the Hamas-governed enclave has killed almost 42,000 Palestinians, according to the local health ministry, while displacing nearly the entire population of 2.3 million, causing a hunger crisis and leading to genocide allegations at the World Court that Israel denies.

Israel has also been separately carrying out a military campaign in Lebanon which in recent days has killed hundreds, wounded thousands, and displaced over a million.

Israel says it is targeting Iran-backed Hezbollah militants.

Trump declares himself a protector of Israel

Former President Donald Trump has positioned himself as Israel's "protector" while warning Jewish voters against supporting Vice President Harris. Speaking at the Israeli-American Council summit in Washington, D.C., during an event commemorating the October 7 Hamas attacks, Trump highlighted his past support for Israel, claiming—without evidence—that Israel's survival depends on his re-election.

"It's total annihilation—that's what you're talking about," Trump said, emphasizing his role as Israel's defender. He criticized the Biden administration and accused Harris of pandering to Hamas supporters, insisting that Jewish voters have "no excuse" to back his Democratic opponents. Trump also took issue with Jewish Democrats, calling them "fools" for supporting the party and suggesting they "should have [their] head examined."

Trump's remarks have sparked backlash. Amy Spitalnick, CEO of the Jewish Council for Public Affairs, denounced his comments, accusing him of invoking harmful antisemitic stereotypes. Jonathan A. Greenblatt, CEO of the Anti-Defamation League, similarly condemned Trump's rhetoric, saying it alienates Jews and could inflame hostility during a time of heightened tension.

Trump's speech also included controversial comments about Middle Eastern immigrants and his intention to reinstate the "Muslim ban." Spitalnick criticized this as racist and Islamophobic, adding to concerns about the divisive nature of Trump's statements.

Some audience members, like Perri Finkelstein, expressed support for Trump, praising his pro-Israel policies, including recognizing Jerusalem as Israel's capital. However, others, like Danny Eisenberg, criticized his comments as "crazy" and "a little antisemitic," questioning the authenticity of his promises regarding Israel.

Russia captures the second town of Ukraine in a week



TTI Report

Russia has captured a second town in Ukraine's eastern Donetsk region within a week, as part of a prolonged offensive that continues unabated. Ukraine's General Staff reported over 150 attacks daily along the frontlines.

Russia's Ministry of Defence announced that its forces had taken control of Hrodivka, a town on the strategic route to Pokrovsk, which Ukrainian commanders have identified as a significant target.

Just five days earlier, Russian troops captured Vuhledar, located on the Donetsk-Zaporizhzhia border. The fall of Hrodivka marks another advance in Russia's ongoing offensive in the region.

Meanwhile, Russia's air campaign has intensified. Ukrainian President Volodymyr Zelenskyy reported that Russia had dropped 800 glide bombs and launched nearly 400 drones and 20 missiles into Ukraine over the past week.

"This daily aerial terror can be stopped, but it requires unity among our partners and long-range [weapons]," Zelenskyy said, urging allies to provide Ukraine with Western-supplied missiles to target Russian airfields from which these glide bombs are launched, often from Tupolev-95 bombers.

Russia has warned of severe consequences if Ukraine is allowed to strike deep into Russian territory. Russian Foreign Minister Sergey Lavrov reiterated this warning on Tuesday, stating, "As soon as this decision is made, if it is made, we will know about it, and the plan that [President] Vladimir Putin mentioned will be put into action."

Meanwhile, Russia collected 118 billion rubles (\$1.2 billion) in taxes from the Ukrainian territories it occupies between January and September 2024, surpassing the total tax revenue from these regions in all of 2023, according to a report by the RBC news website on Wednesday.

In September 2022, Russia claimed to annex the southern and eastern Ukrainian regions of Kherson, Zaporizhzhia, Donetsk, and Luhansk following widely disputed referendums, despite not fully controlling any of these areas.

Donetsk and Luhansk, where Russian-backed separatists had fought Kyiv for eight years before Moscow's full-scale invasion, generated more than 80% of the taxes from the occupied territories. Donetsk collected 56.7 billion rubles, while Luhansk brought in 38.7 billion rubles. Zaporizhzhia and Kherson collected 14.9

billion rubles and 7.9 billion rubles, respectively.

The 22% year-on-year increase in tax revenue reflects Russia's ongoing efforts to integrate these occupied regions into its economic and financial systems, tax experts told RBC.

Despite this growth, Russia still plans to continue providing substantial subsidies to these annexed regions, projecting to spend more than 350 billion rubles (\$3.6 billion) there in 2024.

Russia's draft budget for 2025-2027 allocates 939.8 billion rubles (\$9.68 billion) for the "restoration" of Donetsk, Luhansk, Kherson, and Zaporizhzhia. Of this, 104.5 billion rubles will be directed toward the construction and repair of residential buildings, 80 billion rubles toward infrastructure repair and maintenance, 40 billion rubles for municipal infrastructure restoration, and 30 billion rubles for administrative building repairs.

Additionally, more than 24.7 billion rubles will be allocated for "social support" to those who lost their homes during Russia's invasion.

IMF Report on Pakistan Highlights Key Issues and Challenges Ahead



By Javed Mahmood Choudhry

Pakistan's economy and living standards have lagged behind those of its regional peers for well over a decade. This paper highlights several macroeconomic distortions and policy-related restrictions that have contributed to the country's underperformance. These include protectionist interventions, a cumbersome regulatory and fiscal environment, and insufficient investment in human capital. Despite these challenges, there are also many opportunities for Pakistan to achieve efficiency gains, reallocate resources towards more technologically advanced goods and services, and improve productivity and standards of living across the country.

Pakistan has been falling behind its peers in recent decades in terms of income per capita, competitiveness, and export performance. From 2000 to 2022, Pakistan's GDP per capita grew at an average annual rate of only 1.9 percent. By contrast, Pakistan's peers achieved more than twice this rate: Bangladesh averaged a growth of 4.5 percent, India reached 4.9 percent,

Vietnam 5 percent, and China a growth of about 7.5 percent. As a result, Pakistan has moved further and further behind its peers in terms of living standards, underscoring the need for urgent policy correction. Moreover, compared to regional peers, the country's export growth has been weak, while its competitiveness has declined given an appreciated real exchange rate relative to productivity growth. The recent restoration of stability is an opportunity to implement reforms placing Pakistan on a path of sustained, inclusive, per capita economic growth with stronger export capacity. The IMF has released this report on October 10, 2024.

Pakistan's growth underperformance reflects weak contributions from human and physical capital and shrinking productivity. Economic growth during 2000–20 was mostly driven by physical capital accumulation and an increase in labor hours, with these factors contributing about 1.9 and 1.15 percentage points per year, respectively.

Meanwhile, the contributions from other factors were markedly lower: total factor productivity (TFP) added about 0.8 percentage points per year (and very little in the most recent period) while improvements in labor quality providing only about 0.5 percentage points on average. Over the past four years, gains in total factor productivity and labor quality have shrunk even further. 3. Declining export performance and limited openness to trade challenge Pakistan's development and external viability. The relationship between international trade and economic growth is well established in the literature: exposure to global markets, both through exports and imports, promotes innovation among domestic firms, provides valuable inputs for more sophisticated goods production, and spurs increases in productivity. Compared to other regional peers, Pakistan's export growth has been weak, with sales to the world particularly stagnant during the 2010s. Its many trade restrictions (including exchange measures, restrictions to payments, as well as tariff and

nontariff barriers to imports) have consistently placed Pakistan around the 90th percentile of the Measurement of Aggregate Trade Restrictions index. Greater integration to world trade and fundamentals-driven competitiveness gains would help spur Pakistan's economic development.

Beyond weak exports, Pakistan has struggled to innovate and develop production of more sophisticated export goods, as indicated by its low and declining share of “knowledge -intensive” exports. As of 2022, Pakistan ranked 85th in the Economic Complexity Index, the same value as in the year 2000. With an export basket strongly biased towards agriculture and textiles (cotton yarn, rice, woven fabrics, beef, leather apparel), the country has struggled to reallocate resources towards more technologically complex production. Its current agricultural specialization profile has also been found to limit the country's ability to diversify towards more technologically sophisticated products and although Pakistan does export a limited number of complex goods (including medicines, medical instruments, metal hand tools, batteries, and plastics), many of its higher value-added sectors operate within a highly distorted economic environment, including due to tariffs on intermediate and final goods, which undermine overall competitiveness and domestic competition, and which inhibits transition towards production of more sophisticated goods “related” to what is currently produced.

Persistent policy-induced resource misallocation lies behind the above facts, hampering the incentive to invest and enhance TFP by locking resources in low productivity sectors. Resource misallocation is immediately clear from the entrenched, persistent differences in labor productivity across sectors. Ordinarily such differences would be undone by labor and other factors of production moving from lower to higher productivity activities, eventually evening out the differences across Outstanding Position of Concessional SBP Financing Schemes.

The persistent retention of resources in low productivity activities is thus a major source of the decline in Pakistan's living standards and competitiveness. Several factors are behind this misallocation,

including poor physical and human capital investment, but a core aspect is policy-induced distortions which inhibit the incentives for resources to be deployed more productively.² As seen below, taxes net of subsidies varies considerably across sectors.

Agriculture provides an extreme example of government policies hindering transformation by trapping resources in low-productivity activities. The agriculture sector suffers from one of the lowest levels of labor productivity and has shown both the smallest reallocation relative to peers and the smallest improvement in labor productivity. The government's largescale interventions in agricultural markets have included support prices for raw and processed goods,

discretionary regulatory enforcement. These create significant costs as firms spend resources navigating these regulatory hurdles, which could otherwise be directed towards productive activities, thus hampering investment (including FDI).

Public investment management. Pakistan's tight fiscal environment exacerbates challenges in public investment. Insufficient funding for quality infrastructure projects (as opposed to, for example, parliamentarian-selected projects), and inefficient management of the project pipeline (with a project “throw forward” of 14 years) have led to slow delivery and governance issues. Weak budgetary processes for expenditure planning and control, with high reliance on



and significant preferential taxation treatment, for both income and inputs, which has led to the calcification of the resources in the agricultural sector at the expense of more productive segments of the economy. Despite the significant policy inducements mentioned above, misallocation and investment in physical capital have significantly underperformed peers due to Pakistan's high level of volatility, poor regulatory environment, poor public investment management, crowding out by government financing requirements, and poor public services.

Regulatory environment. A cumbersome and inconsistent regulatory regime has significantly deterred domestic and foreign direct investment. Pakistan has received relatively low FDI net inflows compared to its peers (World Bank, 2024a). This has been exacerbated by a challenging business environment marked by onerous and

supplementary grants, further contribute to these inefficiencies. The development budget's unaffordability is stark, with the total cost to complete projects standing at about ten times its budget allocation in FY25. The hybrid public investment efficiency gap in Pakistan is estimated at around 38 percent, indicating substantial potential to improve infrastructure access and quality even within the current budget. This gap is slightly larger than the peer group mean. Addressing this gap requires enhancing the institutional framework for public investment management, particularly by strengthening the connections between strategic planning, appraisal, selection, implementation, and monitoring and evaluation of projects.

- Poor public services. Pakistan's roughly 82 commercial SOEs have been, in aggregate, loss-making since 2016 and have been a large net recipient of government support

(net of corporate taxes and dividends) over this period. This, combined with poor-quality services from many of these SOEs, has been a significant source of economic inefficiencies. Moreover, as elaborated in the accompanying Staff Report (IMF, 2024), the cost of electricity is high in Pakistan, reflecting inefficiencies (including in DISCOs), theft, high guaranteed dollar returns, and diverted demand. Resolving these issues will allow for lower power prices for all electricity consumers.

- **Crowding out.** Fiscal deficits and overreliance on the banking sector for government financing have crowded out financing for the private sector as private credit to GDP is significantly lower than peers and the

accessibility. Primary and secondary enrollment rates in Pakistan also trail behind those in other lower-middle-income countries, reflecting systemic challenges in ensuring widespread educational participation. Pakistan's health expenditure is a significantly lower share of GDP than that of Nepal and Sri Lanka, with this underinvestment reflected in poorer health outcomes: Pakistan has the highest infant mortality rate and one of the highest rates of stunting among children under five years of age in the region. The World Bank's Human Capital Review projects that if Pakistan can move from its current human capital development path to invest in human capital at the level of its peers, GDP per capita could be around 15 ppts higher

policies like import restrictions and misalignment of the exchange rate have competitiveness and reinforced an anti-export bias.^{4 10} By removing policy-induced distortions and fostering a more competitively neutral business environment, Pakistan could develop a stronger, more competitive and technologically advanced economy. There are a number of complex goods within likely technological proximity (i.e., are highly “related”) to Pakistan's current export basket, including glassware, paints, chemicals, fabrics for industrial use, paper, cosmetics, and rubber products. However, to facilitate the development of such new industries the country needs a level playing field for business, avoiding targeted policies aimed at picking winners. This includes greater integration to global trade and easier access to imports, both as intermediate inputs for production and as final goods to promote domestic competition. The removal of fiscal incentives would reduce the existing misallocation of resources and promote price discovery across firms.

Placing Pakistan on a new economic trajectory requires addressing many distortions as well as improving the quality and level of public investment including in human capital. Key reforms centers on removing the remnants of the old growth strategy based around protection, preferences, and concessions. This has limited competition and the incentive for innovation and investment, locking resources into low-productivity activities (including through Special Economic Zones), which only survive because their profitability is supported by the state. Removing these detrimental protections will spur competition and innovation as new players enter (including from outside Pakistan) and lead to a productivity-enhancing reallocation of resources, including labor. To create space for higher investment in physical and human capital, there is a need to reduce the government's crowding out of private investment and raise additional revenue from undertaxed sectors by removing exemptions and other tax concessions. The modeling results in the accompanying Selected Issues Paper suggest that significant macroeconomic gains come from the implementation of such a distortion-reducing reform agenda.



regional average. This has resulted in a persistent decline in private investment, despite much of industrial private financing being subsidized with a sizable discount below the policy rate, while credit to the government reached 72 percent of total bank lending in FY23.

Health and education indicators for Pakistan have significantly lagged behind those of its regional peers, which has also undermined growth, investment, and productivity. According to the latest data, Pakistan's expenditure on education as a percentage of total expenditure is lower than that of India, Bangladesh, and Nepal. Furthermore, Pakistan's adult literacy rate and the proportion of trained teachers in both primary and secondary education are among the lowest in the region, indicating significant gaps in educational quality and

by 2047. Policies aimed at protecting domestic industries and import substitution have significantly discouraged efficiency gains and resource reallocation. Trade policy has an embedded anti-export bias, characterized by disproportionately high import duties across several sectors. Additionally, high duties on final goods create a cascading effect, incentivizing firms to prioritize domestic sales over exports, as well as reducing the competition from imports faced by inefficient, low-productivity, domestic firms. While Pakistan's weighted average tariff has declined over time, it has remained the second highest among its peers. The imposition of Additional Custom Duties and Regulatory Duties more than offset the formal reductions in tariffs, causing average tariffs to increase from less than 15 percent in FY15 to 20 percent in FY21. External sector

SBP reports a robust growth in digital payments in FY24



By J. Choudhry

The national payment ecosystem has witnessed significant advancements during past few years. The continued growth of digital payments is driven by the increasing accessibility and adoption of digital payment channels, reflecting a strong reliance by the customers on digital payment systems. New and innovative products and services offered by Electronic Money Institutions (EMIs) and Branchless Banking (BB) players is also paving the way for more digitalized economy. The introduction of QR based payments through Raast will reduce the cost of digital payments at merchants and retail stores, and will also contribute in increasing the share of digital payments. The State Bank of Pakistan (SBP) publishes this report to underscore such developments and provide a comprehensive overview of the payments infrastructure, trends of digital payments, and user engagement. The report offers a detailed analysis of the robust health of the digital financial payment systems and highlights the prominent growth observed over the past fiscal year. Notable highlights

during the fiscal year on the performance of payment systems and trends in payments are summarized below:

- Retail payments have experienced remarkable growth in FY24, with the volume increasing from 4.7 billion to 6.4 billion, and the value rising from PKR 403.5 trillion to PKR 546.6 trillion, both increasing annually by approximately 35%. Further, share of digital payments in retail space by volume has increased to 84% in FY24 from 76% in FY23.
- The expanding share of digital payments is mainly associated with the increasing number of customers using digital channels due to the convenience and wide range of products/ services offered through these channels. This year, users of internet banking portals have increased by 25%, mobile app banking by 16%, Branchless Banking (BB) mobile app by 2% and notably customers of e-wallets have increased phenomenally by 85%.
- Mobile banking apps and internet banking portals have been instrumental in driving the growth of digital payments by offering customers seamless, convenient access to a wide range of banking services 24/7. During FY24, payments through these channels have collectively increased by 62% to 1,345.9 million with value increasing by 74% to PKR 69.8 trillion.
- Likewise, digital wallets issued by BBs and EMIs also played an important role in increasing digital payments. During the fiscal year, customers made 2,697.0 million payments through their BB mobile app wallets and 85.2 million through EMI e-wallets, increasing from 1,704.7 million and 33.3 million during FY23 respectively. The value of BB mobile app wallets transactions doubled to PKR 8.8 trillion, while the value of e-wallet transactions increased threefold to PKR 0.23 trillion.
- The network of POS machines has

expanded to 125,593 with an annual growth of 8.9%, indicating greater support for card-based transactions at retail outlets and stores. As of FY23 end, there were 85,386 POS enabled merchants across the country. The network has now increased to 98,936 merchants as of FY24 end marking a growth of 16% in a single year. Through these merchants, a total of 271.4 million transactions of PKR 1.5 trillion took place in FY24, a 36% increase in volume and 41% by value in comparison to previous fiscal year.

- During the same period, a total of 496.1 million transactions amounting to PKR 11.6 trillion were processed through Raast, which is Pakistan's instant payment system. Last year in FY23, number of transactions stood at 147.2 million with value of PKR 3.1 trillion. In addition to increasing trends in payments ecosystem, FY24 also marks an important milestone in the area of cross-border payments. SBP in partnership with Arab Monetary Fund (AMF) signed an MoU to establish a framework of cooperation between Raast,

individuals, businesses, government and financial institutions. To shed light on the national payments ecosystem, the State Bank of Pakistan (SBP) publishes Payment Systems Review on quarterly and annual basis. The reported data is collected from the regulated entities including banks, MFBs, EMIs, PSOs, PSPs, Raast system and RTGS system. The data is subsequently processed, analyzed and summarized to present a meaningful picture of digital financial landscape for the readers. Payments Infrastructure Payments infrastructure refers to the systems, applications, technologies, and networks that facilitate the transfer of money among individuals, businesses, and the governments. It includes everything from payment card processing networks, digital payment platforms to brick and mortar banks and mobile payment solutions.

A robust payments infrastructure is essential for an accelerated financial inclusion and economic development. The advancements in payments infrastructure from FY23 to FY24 reflect significant growth across various payment system areas in the country. The usage of payment cards for purchases at retail stores, merchants and online platforms is steadily increasing, with a noticeable rise in both transaction volumes and merchant adoption on yearly basis. The network of in-store Point-of-Sales (POS) machines has expanded to 125,593, showing a growth of 9% over the year. Similarly, POS enabled merchants has increased to 98,936 merchants marking an annual growth of 16%. Moreover, average number of transactions at POS enabled merchant has increased by 18% to 2,744 transactions/merchant. This behavior indicates not only increased consumer preferences for card-based transactions for day-to-day purchases but also merchants are enabling more POS devices to increase their businesses. The similar trend is also witnessed in e-commerce purchases using payment cards as the number of e-commerce merchants increased by 12% to 7,816.

Likewise, purchases through payment cards at a single e-merchant stands at an average of 5,106 transactions/e-merchant an increase of 11% highlighting a consistent demand for online card based purchases. In addition to the merchants accepting cards,



- E-commerce payments through wallets/accounts is gaining momentum in contrast to card based payments. Around 87% of the digital e-commerce payments were initiated through digital wallets/accounts while only 13% were through payment cards. Collectively, a total of 308.9 million e-commerce payments were made during the fiscal year with value reaching to PKR 405.9 billion. Last fiscal year, only 78% of the ecommerce payments were made from digital wallets.
- Transactions via RTGS saw a significant uptick, rising from 4.9 million to 5.8 million in volume and from PKR 640.4 trillion to PKR 1,043.1 trillion in value during FY23. The major contribution to RTGS transactions came from the settlement of government securities, followed by inter-bank fund transfers, third party customer transfers and ancillary clearing settlement, respectively.

Pakistan's Instant Payment System and Buna, the cross-border payment system operated by Arab Regional Payments Clearing and Settlement Organization, owned by Arab Monetary Fund. Fiscal Year 2023-24 has been a period of steady progress for Pakistan's payment ecosystem, featuring consistent growth in digital transactions and a gradual shift toward a more digitally-driven economy. The comprehensive data presented in this report emphasizes the robustness and resilience of the nation's payment infrastructure, with digital channels becoming the preferred mode of transactions.

Role of Payment System Infrastructure in economic growth

Payment system infrastructure plays a key role in a country's economy as it enables efficient and secure fund transfers between

around 516,317 micro-merchants are onboarded with five major branchless banking (BB) providers. These micro-merchants can accept payments through QR codes and digital wallets, offering a cost-effective alternative to traditional POS terminals. This option is especially beneficial for small businesses and Kiryana stores, enabling them to embrace digital payments without paying usually higher costs associated with card-based infrastructure. Furthermore, network of Branchless Banking (BB) agents expanded to 662,084, providing financial services to underserved and unbanked regions. These agents provide a range of essential payment services, including bill /government payments, funds transfers, cash collection/payment services etc. The growing network of BB agents not only increases access to financial services but also plays a crucial role in promoting financial inclusion by bridging the gap for those without access to traditional banking infrastructure. Card holders can avail cash withdrawal, fund transfers, bill payments and other banking services using ATMs. During the fiscal year, number of ATMs has increased to 18,957, an annual growth of 6%. Cash and cheque deposit machines (CDMs/ CCDMs) also increased to 579 machines, enhancing deposit convenience for customers round the clock.

Users of Digital Payment Channels

Digital payment channels mainly included mobile app banking, internet banking, digital wallet, and payment cards are the corner stones of the payment system landscape. The customers leverage the convenience, agility, and security of digital platforms for transferring funds, paying bills, making online payments and paying for in-store purchases. The rise in adoption of payments through digital channels is driven by the growing preference for cashless transactions, the ubiquity of smartphones, and increasing internet penetration. As of June 2024, mobile banking apps has registered 18.7 million users, while internet banking portals has 12.0 million registered users of banks and MFBs. The widespread use of BB wallets, with 58.7 million users of BB Mobile App wallets highlights the growing reliance on digital platforms for payments, particularly in

locations with limited access to the traditional banking services. Additionally, 3.7 million e-wallet users of EMIs, compared to 2.0 million users in the last year depict that digital wallet industry is flourishing mainly due to the innovative financial products and services by these e-money institutions like request to pay, bill-split, integration of their mobile app with online portal of major government institutions and inward remittance services etc. In terms of year-on-year (YoY) growth, internet banking users have grown by 25%, mobile app banking users by 16% while mobile app based BB wallet users have increased by 2% and users of e-wallets have increased by more than 85% during FY24. This trend indicates greater consumer preference for the simplicity, convenience, accessibility, and efficiency of digital platforms over traditional banking methods. The presence of 54.5 million payment cards reflects customers' reliance on convenience and security offered by these cards. The number of payment cards has witnessed a YoY growth of 9.1% this year. Of these cards, 88.7% are debit cards, 7.3% are social welfare cards, 3.8% are credit cards, and less than 1% are prepaid cards.



In terms of cards by payment schemes, majority (73.1%) of the cards are backed by international payment schemes, while 16.6% are issued by domestic payment scheme and the remaining are either local proprietary (6.1%) or co-badged (4.3%). During the year, more than 5.5 million social scheme welfare cards were replaced with biometric verification facility thus eliminating the need of these cards for cash

withdrawal. 2.3. Payments Summary Payments can be classified into two distinguished categories, one is wholesale payments, which are served through RTGS system (PRISM), while the large volume and relatively smaller value payments are classified as retail payments, which are mainly processed by the banks, MFBs, EMIs, BBs and, PSOs/PSPs. From FY23 to FY24, transactions via RTGS saw a significant uptick, rising from 4.9 million to 5.8 million in volume and from PKR 640.4 trillion to PKR 1,043.1 trillion by value. This surge reflects the consistent reliance on RTGS for large-value settlements, underscoring its vital role in maintaining the efficiency and stability of high-value financial transactions. Retail payments also experienced remarkable growth, with the volume increasing from 4,730.1 million to 6,387.8 million, and the value rising from PKR 403.5 trillion to PKR 546.6 trillion, both increasing annually by 35%.

The share of digital payments in total retail payments rose from 76% in FY23 to an impressive 84% in FY24, driven largely by the rise in BB wallet transactions and mobile banking app-based transactions. ATM-based transactions also contributed

to this growth, reflecting a broader trend towards digitalization in the retail payments space.

RTGS Transactions PRISM

Pakistan Real-time Interbank Settlement Mechanism is Pakistan's RTGS system, designed for settlement of largevalue payments. It allows instantaneous transfer of funds, settlement of government securi-

ties, and ancillary clearing on a realtime and gross basis, ensuring that transactions are smooth, efficient and irrevocable. It also reduces settlement risk in securities related transactions on the basis of Delivery-Versus-Payment (DVP) model. DVP is a securities settlement process that requires that payment is made either before or at the same time as the delivery of the securities.

Furthermore, SBP provides Intraday Liquidity Facility (ILF) to the PRISM participants that is fully collateralized against government securities, so that the payments are cleared without any deadlock. As per the data of FY24, 70% of the transactions by value were government security settlements, while 28% were interbank and third party customer fund transfers, and only 2% were ancillary clearing settlements. Last year in FY23, these percentages were 61%, 35% and 4% respectively.

Retail payments cater to everyday consumer transactions, encompassing a wide array of payment methods such as mobile payments, card based payments, e-commerce payments and online banking transfers. These systems facilitate the smooth exchange of goods and services,

enhancing the convenience and efficiency of day-to-day commerce. The graph above shows that over the last five years (FY20 to FY24), there has been a significant shift towards digital payments. In FY20, digital payments accounted for 55% of retail payments by volume, a figure that has now surged to 84%. While the share of digital payments by value currently stands at 17%, it's important to note that this share was 6% in FY20. This rapid growth underscores the accelerating adoption of digital payment methods, reflecting changing consumer preferences and the increasing integration of technology into everyday financial transactions. Mobile-App based and internet banking has played key role in the rise of digital payments.

In last two years, average annual growth rate of mobile banking has remained around 70% while internet banking around 26%. During FY24, customers executed 931.6 million transactions at ATMs, amounting to PKR 15,017.9 billion, predominantly for cash withdrawals. Average ticket size of cash withdrawal at ATM was PKR 15,011/trxn during FY23 which has now increased to PKR 16,121/trxn during FY24. The POS acquir-

ing institutions, with their 98,936 registered merchants, processed 271.4 million (36%) transactions amounting to PKR 1,502.4 billion (41%) over the year, highlighting the growing use of payment cards. Bifurcation of POS transactions revealed that around 95% of them were of domestically issued cards while the remaining 5% were of foreign issued cards. Card based e-commerce transactions also showed consistent growth reaching 39.9 million transactions (up 26%) amounting to PKR 194.3 billion (37%) during FY24 as compared to FY23. Around 85% of the transactions were made through domestically issued cards while 15% via foreign issued cards. Similarly, of all the cards issued domestically, 95% of them were used on POS machines within the country while only 5% of the transactions were on POS machine in foreign country. Internet banking and mobile banking continued their popularity among the consumers. Internet banking had 223.1 million transactions, with a value of PKR 23,485.6 billion, while Mobile banking transactions reached 1,122.8 million, valued at PKR 46,344.3 billion. Additionally, EMI wallet transactions reached 85.2 million, amounting to PKR 226.4 billion.



Working from home increases productivity manyfold



By Harry Javed

Economics is famous for being a dismal science. Sadly, recent work highlighting the slowdown in productivity growth stretching back to the 1950s is no exception. But I take a more cheerful view because of the great productivity gains promised by the pandemic-induced jump in working from home.

Working from home (WFH) increased about tenfold following the outbreak of the pandemic and has settled in at about five times its pre-pandemic level. This could counter slowing productivity and deliver a surge in economic growth over the next few decades. If AI yields additional output, the era of slow growth could be over. This has been mentioned in a publication of the IMF for the month of September 2024.

The decomposition of economic growth by Nobel laureate Robert Solow, one of the most famous economists of all time, guides my analysis. Solow's 1957 classic paper highlights how growth comes from both the increase in factor inputs like labor and capital and from raw productivity growth. I hang my analysis on his framework by

highlighting in turn how each of these factors will promote faster growth.

Labor

The easiest way to see labor's impact is the survey evidence from across the United States, Europe, and Asia that shows hybrid work is worth about an 8 percent increase in salary. Hybrid work is the typical pattern for office workers, managers, and other professionals, involving usually two or three days a week away from the office. To understand why employees would consider this to be worth 8 percent of their salary, note that typical workers spend about 45 hours a week in the office, yet they spend close to another 8 hours a week commuting. So working from home three days a week saves them about five hours a week, about 10 percent of their total weekly work and commute time.

Most people really dislike commuting, and so place even greater value on this time savings. See, for example, another famous paper, by the Nobel Prize winner Daniel Kahneman. This research found that

commuting is the most detested activity in the day, disliked even more than work itself. This makes it easy to understand why the average employee values working from home so much—with its ability to save hours of painful weekly commuting, alongside the flexibility of being able to live farther from work.

This value of working from home has a powerful impact on labor supply. In the global economy there are tens of millions of people who are on the edge of the workforce. So small changes in the attractiveness of work can bring many millions of them into employment. This marginal labor force includes those with childcare or eldercare responsibilities, those close to retirement, and some folks in rural areas.

One example of this WFH impact on labor supply is the approximately 2 million more employees with a disability who are working in the US following the pandemic. These increases in disability employment have occurred primarily in high-WFH occupations. Employees with a disability benefit in two ways: first, by avoiding long

commutes and second, by the ability to control their work environment at home.

Another example is prime-age female employment in the US, which has risen about 2 percent faster than prime-age male employment since the pandemic. Women's larger role in childcare could be driving this rise in female labor force participation via WFH, according to recent research.

Collectively these effects could increase labor supply by several percent.

Of course, this calculation takes the current population as given. In the longer run, WFH could also increase fertility rates. One story I've heard repeatedly from talking to hundreds of employees and

or three days a week, society needs less office space, and that space can be used for other activities. It also reduces commuting traffic, curbing the need for additional transportation infrastructure. More intensive use of our home capital—the space and equipment in our houses and apartments—can allow society to save on the use of transportation and office capital, which can be redeployed to other uses. In major city centers about half of the land is covered in office space, and given that office occupancy is now 50 percent below prepandemic levels, there is great potential for office space reduction.

Recent data on driving speeds show that traffic is now moving about 2 or 3 miles per hour faster during the morning commute,

Productivity

Classic firm and individual micro studies typically find that hybrid work, the usual pattern for about 30 percent of the US, European, and Asian labor forces, has a roughly flat impact on productivity. WFH benefits workers by saving them from exhausting commutes and typically provides a quieter working environment. But by reducing time at the office, it can also reduce employees' ability to learn, to innovate, and to communicate. These positive and negative effects roughly offset each other, generating no net productivity impact of hybrid WFH, research suggests.

The impact of fully remote working, which has been adopted by about 10 percent of employees, is highly dependent on how well it's managed. Some studies that examined fully remote working during the early days of the pandemic found large negative impacts, potentially because of the chaos of the early lockdowns. Other studies found large positive impacts, typically in more self-directed activities, such as call center or data entry work with well-managed firms.

In summary, the impact of fully remote work is perhaps neutral, because firms tend to adopt it only when such work arrangements match the work activity—often tasks such as coding or IT support, carried out by trained employees in a managed environment. But while the micro productivity impacts on any individual firm may be neutral, the huge power of labor market inclusion means that the aggregate macro impact is likely to be positive.

To explain the benefits of labor market inclusion, consider that fully in-person jobs can be filled only by nearby employees. A human resources or information technology position in New York can, for example, be filled only by a local resident. Even if there are people in Bulgaria, Brazil, or Belize who would be a better fit, they cannot do the job if they are not there in person. But as soon as positions can be filled remotely, employers go from taking the best local employee to taking the best regional employee for hybrid and the best global employee for fully remote work.

Recent studies of work discrimination and reallocation highlight how expanding labor markets to a wider pool of potential



managers is how working remotely makes it easier to parent. This is perhaps most salient in East Asia, where long workdays, punishing commutes, and intense parenting pressures have led to rapidly dropping fertility. If parents can work two or three days a week at home, particularly with flexible schedules that allow them to share parenting responsibilities, this could increase birth rates. Preliminary analysis based on US survey data suggests perhaps 0.3 to 0.5 more desired children per couple when both work from home one day or more a week.

Capital

The beneficial impact of WFH on capital comes from the longer-term release of office space for other uses, like residential and retail. If employees are based at home two

which reduces the need for additional transportation infrastructure and saves the typical commuter a few minutes a day.

Over the longer term, allowing employees to work partially or fully remotely also opens up currently underused land for housing, effectively increasing the usable land supply. Many major cities are heavily congested because most employees do not want to live more than a one-hour commute from the center. If they are required at work only a couple of days a week, longer commutes become possible, opening up space farther outside city centers for housing use.

Collectively, these capital contributions could also raise output by a few percent over the coming decades.

employees can have massive productivity benefits. Going from 10 to 10,000 qualified candidates for a position allows a far more productive match, particularly if AI can help screen applicants. Remote work enables global matching between employees and firms, boosting labor productivity.

An additional macro productivity benefit from working from home is its positive impact on pollution from transportation. The WFH surge has curbed commuting traffic volumes across the US and Europe by an estimated 10 percent. This has reduced pollution, particularly emissions of low-level heavy particulates. Health studies have linked pollution to cognitive and productivity damage. Lowering pollution not only improves our quality of life but can also increase growth.

A positive feedback loop—from working from home to faster growth and back—boosts these impacts. A long history of market-size effects in economics highlights how firms strive to innovate to serve larger, more lucrative markets. When you go from 5 million to 50 million people working from home every day, major hardware and software companies, start-ups, and funders take notice. This leads to an acceleration of new technologies to serve those markets, improving their productivity and growth.

That feedback loop has already begun. The share of new patent applications at the US Patent and Trademark Office that repeatedly use “remote work,” “working from home,” or similar words was flat until 2020 but has started to rise (see Chart 2). This highlights the improvement in technologies. Better cameras, screens, and software and technologies such as augmented and virtual reality and holograms will increase the productivity of hybrid and remote work in the future. This will generate a positive feedback loop between growth and working from home.

One critique of the boom in working from home is the damage to city centers. Retail spending has indeed fallen in city centers, but this activity has relocated to the suburbs, and overall consumption expenditure has resumed its pre-pandemic trend. Perhaps more problematic is the large reduction in valuations of commercial office space. Although this represents a loss of valuation for investors in the office sector, the release of city center space for residential use will in the long run make downtown living more affordable. The cost of living in the city rose dramatically in the 1990s and 2000s, pricing many middle- and lower-income employees out of city centers. This is especially problematic as many of these workers provide essential services, such as firefighting, policing, teaching, health care, food, transportation,

and other work that can only be done in person. Cutting the amount of space for office use in city centers and converting it to residential use would make housing more affordable for these essential workers.

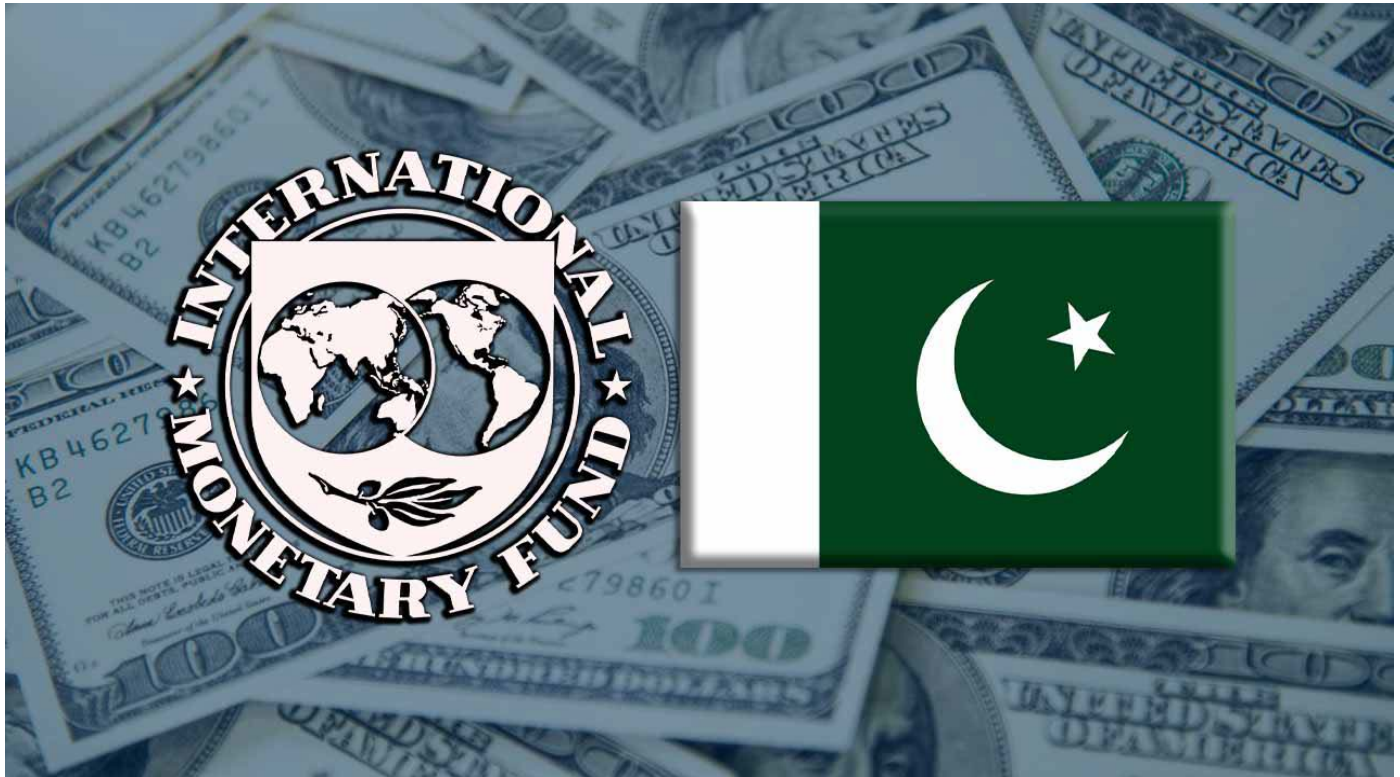
The 2020 surge in working from home has helped offset the pre-pandemic productivity slowdown overall and is boosting present and future growth. Being an economist usually means balancing winners and losers. Analyzing changes in technology, trade, prices, and regulations usually has mixed effects, with large groups of winners and losers. When it comes to working from home, the winners massively outweigh the losers. Firms, employees, and society in general have all reaped huge benefits. In my lifetime as an economist, I have never seen a change that is so broadly beneficial.

This leaves me in the unusual place of being an optimistic “dismal scientist.” But it’s a place I’m happy to be as I write this while working from home.

Working from home was not an option for most people before March 11, 2020, when work and home life suddenly collided. Stanford University’s Nicholas Bloom was studying the potential impact of remote work long before the pandemic launched it into the mainstream and now has data to suggest businesses should stick to the hybrid working model.



Pakistan Needs to Look Beyond Bailouts



By Irfan Qureshi

As Pakistan secures yet another bailout package from the International Monetary Fund (IMF), the familiar questions about its long-term economic viability loom larger than ever. Finance Minister Muhammad Aurangzeb's declaration that this will be the country's last IMF program sounds hopeful, but it rests on a fragile promise: that the government will finally implement the structural reforms needed to break free from this cycle. However, the deeper reality is that Pakistan has been here before promising reforms, tightening fiscal discipline, and vowing to chart a new course, only to fall back into the same debt traps. This time, as the nation faces a new mini-budget, it's crucial to ask if loans and bailouts are really enough to stabilize a struggling economy or if they are merely band-aids covering much deeper wounds.

Pakistan's recent mini-budget and the IMF bailout provide some breathing room in a suffocating fiscal environment. Inflation, which dropped to 6.9% in September 2024, the lowest it has been since January 2021, offers a glimmer of relief. Yet, while these

numbers may temporarily calm the economic anxiety of the public, they do not reflect a permanent shift. The real question is whether this improvement is sustainable or if it will quickly be reversed, as has been the case so many times before. Pakistan's economic history shows a repetitive reliance on short-term fixes, with each bailout seemingly buying time without addressing the underlying inefficiencies that prevent long-term growth.

At the heart of this recurring crisis is the reliance on external borrowing. The IMF, while often seen as a financial savior, comes with heavy strings attached, conditions that lead to austerity measures, cuts in subsidies, and tax hikes, all of which are painful for the population to bear. The country's poor and middle classes often feel the brunt of these conditions, as the cost of living rises and public services are reduced. The IMF's involvement, although essential in stabilizing the economy, doesn't provide a vision for long-term prosperity. In fact, loans might temporarily plug the holes, but they do not repair the ship itself.

Minister Aurangzeb's emphasis on increasing the tax-to-GDP ratio and expanding the tax base is a sound strategy, but this is an age-old promise that Pakistan's governments have repeatedly made. Increasing the number of tax filers is undoubtedly positive, but until this becomes a system-wide shift where all sectors of the economy contribute their fair share, it will remain an incomplete fix. Taxation reforms are often politicized, and many sectors, particularly the informal economy, remain out of the tax net. What Pakistan needs is a deeper, structural transformation that ensures tax compliance across all sectors, not just a narrow focus on salaried workers and businesses already in the tax system.

While the IMF program provides a temporary buffer, Pakistan has other avenues that could offer more sustainable solutions, particularly in expanding its trade relationships. The recent uptick in trade deals, especially with major markets like the United States, offers a brighter future if managed properly. Trade not only generates foreign exchange but also provides opportunities for technology transfer, skill

development, and the expansion of Pakistan's manufacturing base. Diversifying Pakistan's trade portfolio, particularly in sectors like textiles, technology, and services, could be key to driving real economic growth and job creation. The potential to transform these opportunities into long-term gains could position Pakistan to wean itself off its dependency on external loans.

However, all of this potential will remain unrealized without serious attention to structural reforms. For years, successive governments have acknowledged the need to reform the energy sector, address the inefficiencies of state-owned enterprises (SOEs), and privatize loss-making industries. Yet, despite this recognition, meaningful action has been slow. The energy sector continues to be a significant burden, with inefficiencies and corruption leading to power outages and inflated costs. Similarly, SOEs drain public resources that could otherwise be invested in development projects, infrastructure, or education. Reforming or privatizing these sectors is no longer an option but a necessity if Pakistan is to avoid repeating its past mistakes.

There is also a critical need for stability in the banking sector. Minister Aurangzeb pointed out that the Karachi Interbank Offered Rate (KIBOR), rather than the policy rate, is the true benchmark for business borrowing. Encouraging banks to



lend more to the private sector, instead of the government, could be a game-changer. The private sector, not the government, should be the engine driving economic growth. But for that to happen, the government must provide a stable policy framework that gives businesses the confidence to invest. Too often, Pakistan's economic policies have been subject to reversals and political whims, creating uncertainty that discourages both local and foreign investors.

At this critical juncture, Pakistan stands at a crossroads. The mini-budget and the IMF bailout might provide a brief respite, but they are not enough to address the deeper, systemic issues holding back the economy. As long as the country continues to rely on external loans without implementing the reforms necessary for self-reliance, it will

remain trapped in a cycle of debt. The real challenge is not in securing another loan but in ensuring that this is indeed the last one.

Minister Aurangzeb's optimism about Pakistan's economic future is admirable, but words must now be matched by action. The country needs a coherent, stable policy environment that encourages private sector growth, expands trade, and implements long-awaited structural reforms. Without these, the IMF bailout will be just another chapter in Pakistan's long history of economic mismanagement. Loans can provide temporary relief, but they cannot buy lasting stability. It's time for Pakistan to take control of its economic destiny, and that begins with breaking the cycle of dependency and focusing on real, sustainable growth.



The Rise and Fall of Inflation

By Danny Javed

As inflation began to rise in 2021, most policymakers and analysts predicted that the increase would be neither particularly large nor persistent. But by 2022, inflation had become an acute problem for central bankers. Then, after some of the sharpest and most synchronized monetary policy tightening on record, world inflation ebbed almost as suddenly as it had risen.

We see two broad explanations. The first stresses that inflation rose at the same time in most countries because they were subjected—to varying degrees—to a similar sequence of shocks: the pandemic, mobility restrictions, and associated economic policy measures, especially the extent of fiscal and monetary support. This emphasizes domestic drivers. More fiscal and monetary support, tighter labor markets, or less-well-anchored inflation expectations would translate into higher inflation. The IMF has published this article in its September 2024 publication, shared with analysts and media persons globally.

The second stresses that inflation rose everywhere at the same time, not because local shocks were identical across countries, but because global causes were at play. The surge in energy and food prices, intensified by Russia's invasion of Ukraine, triggered an energy crisis akin to the 1970s oil shocks. Geopolitics was the cause of both series of events. And, indeed, global energy prices and headline inflation rose together even as long-term inflation expectations held steady.

Baby Burst

Our recent research (Dao and others, forthcoming) covering 21 advanced and emerging market economies sheds light on these competing explanations by decomposing headline consumer price inflation into underlying (core) inflation and headline shocks—deviations of headline from core inflation. We explain core inflation by long-term inflation expectations and broad measures of macroeconomic slack, such as the unemployment rate, the output gap, or the ratio of vacancies to



unemployment. We explain headline inflation shocks by large price changes in particular industries, such as food, energy, or shipping, and by measures of supply-chain disruptions. We also allow for the pass-through over time from these industry price shocks to core inflation, which can occur through the effects of headline inflation on wages and other production costs.

Putting the different pieces together, we estimate the respective contributions of headline shocks, their pass-through into core inflation, broader measures of macroeconomic slack, and changes in long-term expectations to the rise and fall of inflation across countries.

Overall, we find that headline shocks and their pass-through into core inflation account for most of the rise and fall of inflation. Broader measures of macroeconomic slack and changes in longer-term inflation expectations generally contribute little.

Baby Burst

The United States is a significant exception. The contribution of broad macroeconomic tightness to inflation remains greater than in other economies despite the significant cooling of the labor market since early 2023. The fall in US headline inflation since February 2023 reflects equally the cooling of the broader economy and the fading pass-through from earlier headline shocks.

Baby Burst

The bottom line is that inflation's rise and fall reflected primarily global drivers, but local circumstances mattered too. We find, for example, that differences in local energy price policies, including subsidies for people and businesses, explain differences in the role of energy price shocks in driving inflation. France, for instance, had large price-suppressing fiscal measures and a relatively small contribution of energy to headline inflation shocks.

Monetary policy also played a critical role in defeating inflation. Throughout this period, long-term inflation expectations remained well anchored. This suggests that central banks retained credibility and that this helped prevent wage-price spirals. Global tightening of monetary policy may also have helped bring down global demand and hence energy prices. At the same time, energy shocks and their pass-through, as well as their reversal, account for the bulk of the rise and fall of inflation, without the need for a deep economic slowdown. Even so, in the case of the United States, strong macroeconomic conditions have been a more important contributor to core inflation than in other countries. Since March 2024, when our sample ends, US labor market conditions have further moderated, and this should help inflation return to target.

Disruption -The Calculus of Innovation in Banking



By Zeeshan A. Shah

The future has imploded into the present. With no nuclear war, mind is the new battlefield. Mega-corporations are new governments, with computer generated info-domains as power frontiers. Though there is better chemistry between science and mind, we are all becoming 'digital nomads'. Information is power and currency and 'digital' becomes the game changer. Cyber-Culture is under the radar. An unordinary society, an unchained alliance with the tech-world A.K.A -Disruption.

Banking was different a decade ago. Service Excellence through face-to-face customer sales acquisitions determined first-mover advantage as a market share tactic. With populations multiplied by the millions over tech-space, attention spans shift fast while 'access' is power. The changing sales dynamics will lead to transformative sales for future banks.

We are a "modern primitive"— a human being with savage instincts and a lethal mind in seeking information to acquire access & profit. Media is kingpin. The future of fun is computer crime, fantasy machines and secret codes. Turn on the brain – activate the senses and everything you love has become complicated -A.K. A-Disruption. With tremendous population growth, fast consumption and lifestyle, the turbo-charged 'Homosapien world' needs acceptable disruption, which is subject to the gravity of our satisfaction, which is limitless.

In the post-covid world, digital hunger is relentless, as we realign strategy from stagnation to re-growth, with every mega-corporation aiming at reduced manpower, consolidation and rightsizing while surpassing share of wallet and short-term sustainability, chopping off high costs through change management.

Information is commodity and customer is king. With multiple product options, the physical to digital access from subscription to a service is based transaction safety & immediate service delivery, with faster evaluation of client funds and domains, be it through ATMs, tablets, cell phones or laptops.

Banking in the past was defined by physical KYC (Know your customer) procedures, while Anti-Money laundering laws today are stringent yet flexible. Market share access today through 'on-line media' is pure success in the digital landscape. Add knowledge to your portal and secure more lines of credit, identify wider client preferences and pre-sell customer solutions.

It's a pocket universe and safe access to money is priority one.

Here, digitalization can go wrong or right. As flight of capital depends on a push of a button, interpersonal relationships with clients are vital to build user-provider partnerships. Successful banks will invest in R&D. In the past, it was a seller's market with fewer risks with customer retention and loyalty. With digital solutions wired to

the brain today, it can be a 'sellers haven' depending on the "disruptive calculus".

Today, banks may rely on calculated disruption and AI tactics in a virtual world, where man is replaced by machines and IVR transforms phone banking with less brand loyalty and more options to buyer.

Building effective eco-systems would be possible if we disrupt with ease. To do that, there are the 4 elements: 1) Globalization-with low barriers to entry, there is a need to understand global trends closely by doing need-driven analytics. 2) Buyer psychology-with cultural barriers in the tech-world, the future means faster access to buying habits through social media fact-checking and increasing buyer access to end-product or service. 3) Customization- better marketing through collective wisdom as the world relies heavily on plastic currency today. Debit and credit cards have led to mass-customization and the same must carry on effectively as competitive advantage is simply about how to do the same thing better and faster than the rival. 4) Revolution- different challenges require different solutions. Driven by human ingenuity to reduce cost of doing business, success banking is all about technology and service excellence.

In the age of evolution, customer experience is the new revolution and the future is digital. Disruption to achieve higher financial access to banks will remain the core success for the digital service industry.

5G Technology



By Mahnoor Saleem

What is 5G technology?

5G is the fifth generation of mobile networks, succeeding 1G, 2G, 3G, and 4G. This new global wireless standard is designed to create a network that connects nearly everyone and everything, including machines, objects, and devices..

5G wireless technology is designed to provide faster multi-Gbps peak data speeds, ultra-low latency, enhanced reliability, massive network capacity, greater availability, and a consistent user experience for more people. This improved performance and efficiency enable new user experiences and connect various industries innovatively.

Who invented 5g?

No single entity can claim to have "invented" 5G, several key contributors have played significant roles in its development. Companies like Ericsson, Nokia, Qualcomm, Samsung, Huawei, and ZTE have each introduced essential innovations for 5G networks.

Speed of 5g network:

5G technology is built to deliver peak

data rates of up to 20 Gbps in line with IMT-2020 standards. Qualcomm Technologies' leading 5G solution, the Qualcomm® Snapdragon™ X65, can achieve downlink peak data rates of up to 10 Gbps. However, 5G offers more than just speed. It significantly increases network capacity by utilizing new spectrum options, such as mmWave.

Additionally, 5G reduces latency for quicker responses and ensures a more consistent user experience, maintaining high data rates even as users move. The new 5G NR mobile network is also supported by a robust Gigabit LTE foundation, providing widespread Gigabit-class connectivity.

The benefit of 5g:

5G offers high speeds, low latency, and massive capacity, transforming your mobile device experience and beyond.

This technology has the potential to revolutionize industries and make an immediate impact on customers. 5G can enhance business efficiency and give consumers faster access to information than ever. It enables connected cars, creates new fan experiences at stadiums, and enriches educational opportunities for students. Additionally, it supports advancements in artificial intelligence (AI) for public

safety and enhances gaming and esports experiences.

The goal of 5g:

5G is engineered to support a 100x increase in traffic capacity and network efficiency. It offers lower latency compared to 4G, achieving a remarkable 10x reduction in end-to-end latency, bringing it down to just 1 ms for more instantaneous, real-time access.

What sets 5G apart from earlier generations of wireless networks?

Here are some key differences between 5G and its predecessors:

- **Smaller physical footprint:** 5G transmitters are more compact, and its "cells"—the areas used for wireless connectivity—are smaller and require less power.
- **Improved error rates:** 5G utilizes a more advanced Adaptive Modulation and Coding Scheme (MCS) for data transmission, resulting in a significantly lower Block Error Rate (BER) compared to 3G and 4G networks.

- **Enhanced bandwidth:** By utilizing a wider range of radio frequencies—including low-band (below 1 GHz), mid-band (1 GHz–6 GHz), and high-band (24 GHz–40 GHz)—5G can support many more devices simultaneously.
- **Lower latency:** 5G offers reduced latency, meaning data travels more quickly between locations, making tasks like downloading files and working in the cloud noticeably faster.

What is the future of 5G?

Interest in 5G networks, along with the devices and applications that operate on them, is understandably high among consumers and business leaders alike. A recent IDC white paper indicates that nearly 120 million 5G devices are projected to ship in the US by the end of 2023, marking a 9.3% increase from the previous year. By 2027, this number is expected to reach 155 million units, representing a compound annual growth rate (CAGR) of 7.4%.

Globally, while exact figures vary, a Statista report estimates that 59% of smartphones are 5G compatible in 2023, with that figure anticipated to rise to over 82% by 2027.

But what does this growing interest truly signify? With new technologies, it can be challenging to differentiate genuine advancements from mere hype. Here's a closer look at some key areas where 5G is expected to make a significant impact.

Healthcare

In healthcare, 5G is already driving greater efficiencies, deeper data insights, and improved patient outcomes. Its low latency, high speed, and increased bandwidth facilitate the discovery of new treatments, remote robotic procedures, and real-time access to patient information regardless of location.

Specifically, 5G will:

- Increase the number of IoT devices for remote patient monitoring.
- Provide reliable connectivity with real-time results, allowing for quicker,

more informed decision-making in patient care.

- Enable the swift and secure transmission of HD images and videos, such as X-rays and mammograms, for remote analysis.

Supply Chains

As 5G connectivity expands, supply chains will benefit from its rapid speeds and enhanced reliability. The digitization of global trade relies heavily on high-speed data transmission, and 5G can significantly improve efficiency, reduce costs, and enhance security.



Currently, 5G is already being utilized in airports, ports, and train stations—key logistics hubs in the supply chain. However, its potential is just beginning to be explored. Future applications may include IoT devices that monitor inventory levels, cashier-less checkouts, and the use of HD cameras and drones for security.

Fixed Wireless Networks

The concept of fixed wireless connections—providing internet access through radio waves instead of cables or fiber—has the potential to deliver affordable internet to more people. In a fixed 5G setup, an antenna connects a home or business to the nearest 5G transmitter, offering speeds and reliability comparable to fiber or cable connections at a lower cost. According to a recent World Bank blog, wireless internet connectivity helps lift millions out of poverty each year. A cost-effective 5G solution could bring the benefits of internet access to underserved communities.

Smart Cities

Urban areas are likely to undergo significant transformations with 5G connectivity.

This technology is already helping cities improve traffic management and air quality through IoT-connected sensors, with even more innovations on the horizon. One promising area is the integration of AI within smart cities. Current pilot programs are exploring how 5G-enabled AI can enhance energy management and improve emergency response systems. In Vienna, for example, the WienBot AI chatbot assists users with everything from finding local amenities to navigating complex administrative tasks.

Edge Computing and AI

Edge computing—a framework that

leverages 5G to process data closer to its source—promises to give enterprises unprecedented control and faster insights from their data. This is particularly crucial for cloud computing, where AI requires substantial power for data analysis.

5G connectivity is vital for maximizing the value of edge computing. For instance, analyzing data at its source eliminates the need for additional resources when transmitting information. Soon, edge computing may enable real-time AI analysis of large data volumes across various applications, from fitness and health apps to remotely operated vehicles like drones. By 2025, Gartner predicts that 75% of enterprise data will be processed at the edge, up from just 10% today.

Ways to be prepared for 5g:

While 5G may seem just around the corner due to the buzz surrounding it, significant rollout will still take time. However, upgrades have begun in some areas, so it's essential to be prepared. Here are some steps you can take to enhance your security

and privacy:

1. Install antivirus software: Protect all your devices with a reliable antivirus solution, such as Kaspersky Total Security, to help prevent infections.
2. Use a VPN: A Virtual Private Network can safeguard your data from unauthorized access and keep your online activities private.
3. Practice strong password security: Always use passwords when available, and ensure they are strong. The best passwords are long, random strings of characters, including uppercase and lowercase letters, numbers, and symbols.



4. Update default passwords on IoT devices: Change the default “admin/-password” credentials on all your Internet of Things devices. Refer to your device’s user manual or contact the manufacturer for guidance on how to update these settings.
5. Keep IoT devices updated: Regularly install security patches on all your devices, including smartphones, computers, smart home devices, and even your car’s infotainment system. Ensure that any device connected to the internet, Bluetooth, or other data channels is up to date with the latest apps, firmware, and operating system updates.

Concerns of 5g technology:

5G cybersecurity requires significant

enhancements to address the increasing risks of hacking. These security concerns stem both from the network itself and the devices connected to it, putting consumers, governments, and businesses at risk.

Here are some key cybersecurity challenges associated with 5G:

1. Decentralized security: Unlike pre-5G networks, which had fewer hardware traffic points, 5G’s dynamic, software-based systems involve many more traffic routing points. Ensuring the security of all these points is crucial; any unsecured area could jeopardize the entire network.
2. Increased bandwidth strains security

monitoring: While existing networks are limited in speed and capacity—facilitating easier real-time security monitoring—the expanded bandwidth of 5G could complicate these efforts. The increased speed and volume may challenge security teams to develop new strategies to combat threats effectively.

3. Vulnerabilities in IoT devices: Many IoT devices are manufactured with inadequate security measures, particularly low-cost smart devices. With 5G enabling more connections, billions of devices with varying security levels could become potential breach points. Smart TVs, door locks, refrigerators, and even simple devices like fish tank thermometers can weaken network security. The absence of standardized security protocols for IoT devices increases the likelihood of network

breaches and hacking incidents.

4. Lack of encryption during initial connections: Early connection processes may not employ robust encryption, exposing device information that can be exploited for targeted attacks. Hackers can gather details about connected devices, such as their operating systems and types (e.g., smartphone, vehicle modem), allowing for more precise attack planning.

Cybersecurity vulnerabilities can manifest through various attack forms, including:

- Botnet attacks, which commandeer a network of connected devices to launch large-scale cyberattacks.
- Distributed denial-of-service (DDoS) attacks, which overload a network or website, rendering it inoperable.
- Man-in-the-Middle (MiTM) attacks, which secretly intercept and alter communications between two parties.
- Location tracking and call interception, achievable if attackers possess even minimal knowledge of broadcast paging protocols.

Conclusion:

The Ministry of Information Technology and Telecommunication (MOITT) made significant progress in October 2023 toward its ambitious goal of launching 5G services in Pakistan by August 2024.

5G is already a reality, with global operators beginning to roll out new networks in early 2019. Major Smartphone manufacturers are also launching 5G devices, making it accessible to even more users soon.

As of now, 5G has been deployed in over 60 countries, with a faster rollout and adoption rate compared to 4G. Consumers are thrilled about the high speeds and low latencies, but the advantages of 5G extend beyond that. It offers capabilities for mission-critical services, enhanced mobile broadband, and extensive IoT applications. While it’s difficult to predict when everyone will have access to 5G, the momentum in its first year is impressive, and we anticipate that more countries will introduce their 5G networks in 2020 and beyond.

Tesla CEO Elon Musk launches long-awaited robotaxi _ Cybercab

Musk envisions a fleet of self-driving Tesla taxis, which passengers will be able to hail via an app. Additionally, Tesla owners will have the option to list their vehicles as robotaxis on the app, generating income from their cars.



TTI Staff Report

Tesla CEO Elon Musk unveiled the long-anticipated robotaxi, named “Cybercab,” featuring two gull-wing doors and no steering wheel or pedals, during a highly publicized event on Thursday. Musk introduced this futuristic vehicle as part of his vision for Tesla’s long-term growth, positioning it as a game-changer for the electric vehicle industry.

Arriving on stage in one of the Cybercabs, Musk announced that production is set to begin in 2026, with the vehicles expected to retail for under \$30,000. He also highlighted the low operational cost, estimating it at just 20 cents per mile.

“Most cars spend the majority of their time idle,” Musk explained. “But if they’re autonomous, they could be utilized five or even ten times more.”

The event generated significant excitement on social media, with speculation and anticipation building around the potential announcements. However, investors and analysts have raised concerns about the technical challenges and tempered their expectations. A social media post revealed that Stellantis chairperson John Elkann and

Musk’s younger brother, Kimbal Musk, were in attendance.

Musk envisions a fleet of self-driving Tesla taxis, which passengers will be able to hail via an app. Additionally, Tesla owners will have the option to list their vehicles as robotaxis on the app, generating income from their cars.

Held at the Warner Bros studio near Los Angeles, California, the event was titled “We, Robot”—a nod to Isaac Asimov’s “I, Robot” stories and Musk’s broader vision of Tesla as an “AI robotics company”

rather than merely an automaker. The event attracted investors, analysts, and Tesla enthusiasts, many of whom were eager to learn how quickly Tesla can scale robotaxi production, the associated costs, and the profitability of the venture.

Also under scrutiny was the progress of Tesla’s Full Self-Driving software, which is expected to be central to the robotaxi platform. Attendees were also looking forward to possible updates on cheaper Tesla EV models and developments related to Tesla’s humanoid robot, Optimus.



What are black holes



By Hina Kashif

If you packed more and more mass into the same tiny space, eventually it would create gravity so strong that it would exert a significant pull on passing rays of light. Black holes are created when massive stars collapse at the end of their lives (and perhaps under other circumstances that we don't know about yet).

A black hole is an astronomical entity with a gravitational pull so intense that nothing, not even light, can escape it. The boundary known as the event horizon marks the point at which the escape velocity exceeds the speed of light—the ultimate speed limit of the universe. Once matter and radiation cross this threshold, they cannot escape the black hole's grasp.

When you pick up a bowling ball, it's heavy because the matter is densely packed. If you packed more and more mass into the same tiny space, eventually it would create gravity so strong that it would exert a significant pull on passing rays of light.

Black holes are created when massive stars collapse at the end of their lives (and perhaps under other circumstances that we don't know about yet). One of the first steps toward the discovery of black holes was made by University of Chicago professor

Subrahmanyan Chandrasekhar, when he realized that massive stars would have to collapse after they ran out of fuel for the fusion reactions which keep them hot and bright.

The universe is full of black holes. In the past decade, scientists have detected the signals of their collisions and taken images of the light from the gas swirling around them—and this has helped us learn many things about the universe. For example, black holes have helped us test Einstein's theory of general relativity, which describes how mass, space, and time are related to one another. Scientists think they can tell us much more about these and other essential rules of the universe.

And on a more personal level, the super-massive black hole at the center of our own Milky Way galaxy may have played a role in how Earth came to be here!

What do black holes look like?

Black holes themselves are invisible—they emit virtually no light and so cannot be seen directly. But we have developed several ways to find them anyway.

By looking for the stuff that's falling in. If material is falling into a black hole, it travels at such high speeds that it gets hot and glows very brightly, and we can detect that. (That's how the Event Horizon Telescope took its famous first images of black holes.) Scientists hope to use this method to learn a lot more about how and what black holes "eat."

By seeing their gravity pulling on other things. We can find black holes by watching the movements of visible objects around them. For example, a black hole's gravity is so strong that nearby stars will orbit around them, so we can look for stars behaving strangely around a patch of "empty" space. From this, we can calculate exactly how heavy that black hole must be. That's how Nobel Prize winner Andrea Ghez and her team detected the supermassive black hole at the center of our own galaxy.

By detecting the gravitational ripples when they collide. We can also detect black holes by detecting the ripples in space-time created when two of them crash into each other. From that signal, we can tell how massive the black holes were, how far away they were, and how fast they were traveling when they collided.

What's inside a black hole?

The short answer is that no one knows!

"In some ways that's one of the most profound questions in physics," said University of Chicago Prof. Daniel Holz. "There are not many cases in physics where we simply cannot predict what happens, but this is one of them."

Black holes have two parts. There is the event horizon, which you can think of as the surface, though it's simply the point where the gravity gets too strong for anything to escape. And then, at the center, is the singularity. That's the word we use to describe a point that is infinitely small and infinitely dense.

We have a good understanding of what the event horizon looks like, thanks to the laws of general relativity. But as you get close to the singularity itself, we lose the ability to even predict what it looks like.

"Very near the singularity, one would expect quantum effects to become important. However, we don't yet have a quantum theory of gravity (or, at least, one capable of reliably making such predictions), so we just don't know the correct description of the singularity—or even whether it really is a singularity," said University of Chicago Prof. Robert Wald.

Scientists think that black holes eventually will explode, but it will take many, many times longer than the current age of the universe for that to happen. What will it look like when that happens? That's another big mystery.

"Maybe there's a little nugget left behind containing all of the information that fell into the black hole, maybe there's a portal to a new universe, maybe the information is just gone forever; we simply don't know," said Holz.

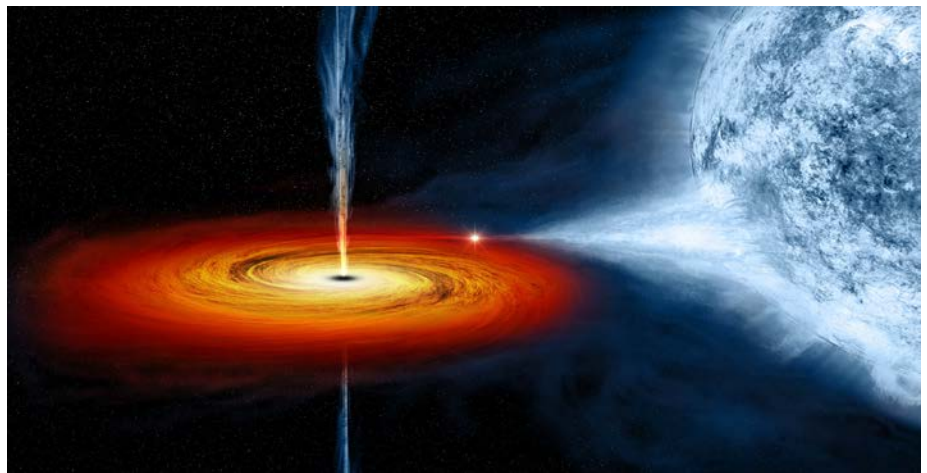
(If all of this is unsatisfying, know that it keeps scientists awake at night, too.)

How do black holes form?

Scientists know about one way that black holes form, but there may be others.

One way to make a black hole is to have a massive star collapse at the end of its life. Prof. Subrahmanyan Chandrasekhar was the first to calculate that when a massive star burns up all its fuel, it will collapse. The idea was ridiculed at first, but other scientists calculated that the star continues forever to fall inward toward its center—thus creating what we called a black hole.

Black holes can grow more massive over time as they "eat" gas, stars, planets and even other black holes!



There's another type of black hole called a supermassive black hole. These are way too massive to have been created by one star collapsing; it's still a mystery how they form. Black holes can eat other black holes, so it's possible that the supermassive ones are made of many small black holes merged together. "Or perhaps these big black holes were especially hungry, and ate so much of their surroundings that they grew to enormous size," said Prof. Holz. But we can see these supermassive black holes formed very early on in the universe—maybe too early to have been made by stars getting old enough to collapse—so it's possible there's some other way to make a black hole that we don't know about yet.

What is a supermassive black hole?

There are two kinds of black holes: star-sized black holes and supermassive black holes.

Supermassive black holes are so named because they contain on the order of millions to billions times the mass of our sun.

As far as we can tell, nearly every galaxy in the universe has one of these supermassive black holes sitting right at its center like a seed. And they are correlated—a bigger galaxy has a bigger black hole, and a smaller galaxy has a smaller black hole. All of this makes scientists think these supermassive black holes have something to do with how the galaxies formed. But that relationship is still a mystery, and so is how the supermassive black holes formed in the first place.

Our "neighborhood" supermassive black

hole, the one at the center of our own Milky Way galaxy, is called Sagittarius A* (pronounced A-star). It's about 15 million miles across and contains the equivalent of 4 million suns' worth of mass. Don't worry; it's much too far away to pose any danger to Earth.

What do black holes eat?

Contrary to what you may have seen in movies, black holes don't actually "suck" things in. For example, there are actually stars orbiting the supermassive black hole at the center of our galaxy, and they'll keep orbiting without falling in unless something else disturbs them. An object really has to fall right into the mouth of a black hole for it to be eaten. (And the mouth, which we call the event horizon, of a black hole, is tiny; if the entire Earth were to collapse and form a black hole, its mouth would be less than an inch across!)

But the movements of stars and galaxies do sometimes mean that stuff falls into a black hole's mouth. Sagittarius A*, the black hole at the center of our galaxy, mostly eats interstellar gas and dust that is drifting

around. With telescopes, we have seen other black holes eating stars and even the gas from neighboring galaxies.

Black holes can be “messy eaters.” As objects are being ripped apart, some of the gas and matter can be flung off at high speeds. Sometimes this is so powerful that it forms jets and winds shooting outwards at nearly the speed of light, and this can affect the galaxy containing it. These jets can blow apart nearby stars and planets; or they can provide just the right amount of churn to create the ideal conditions for making new stars over millions of years.

How were black holes discovered?

The first inkling that anyone had about black holes came in 1930, when young astrophysicist Subrahmanyan Chandrasekhar was mulling over the consequences of several recent discoveries, including Einstein’s theory of special relativity.

He calculated that all stars larger than 1.4 times the mass of our sun would eventually run out of fuel and collapse.

Scientists at the time were shocked and skeptical. The most famous astrophysicist at the time, Arthur Eddington, publicly trashed the idea at a gathering, saying, “I think there should be a law of nature to prevent a star from behaving in this absurd way!”

However, the damage was done. “Once the

astrophysics community had come to grips with a calculation performed by a 19-year-old student sailing off to graduate school, the heavens could never again be seen as a perfect and tranquil dominion,” physicist Freeman Dyson later wrote.

Scientists soon worked out that other laws, including Einstein’s theory of general relativity, required black holes to exist.

The idea became increasingly accepted. In the latter half of the 20th century, eminent theoretical scientists, including Steven Hawking at Cambridge, John Wheeler and Jacob Bekenstein at Princeton, Chandrasekhar and Robert Wald at the University of Chicago, and many others, explored the details of the mathematics and physics behind black holes.

Meanwhile, evidence from telescopes began to pile up that black holes were out there in the universe.

In the 1960s, quasars were discovered—faraway objects that were emitting such strong radiation that there was no explanation other than gigantic black holes chewing up and spitting out matter.

Throughout the 1990s, scientists including Andrea Ghez and Reinhard Genzel precisely tracked the movements of stars around the center of our galaxy, proving they were orbiting around something invisible but so massive that it had to be a black hole. (They would receive the Nobel Prize in 2020 for this work.)

Then, in 2015, two special detectors known as the Laser Interferometer Gravitational-Wave Observatory (LIGO) picked up the ripples from a pair of black holes colliding. (This also received a Nobel Prize, in 2018). They have since detected nearly 100 such collisions.

In 2019, the Event Horizon Telescope, a collection of telescopes around the world acting in concert, was able to take an image of the gas swirling around a gigantic black hole in another galaxy. They followed this in 2022 with an image of our “own” black hole—the one that sits in the center of the Milky Way. We are making more discoveries all the time!

What do black holes tell us about the universe?

Black holes are kind of like a playground for physicists. “They are literally made out of space and time,” said Prof. Holz. Because they are so extreme, they are the perfect place to test the limits of the rules of the universe.

Observing them and thinking about their properties have yielded enormous insights about the nature of the universe. For example, detecting their collisions allowed us to test Einstein’s theories about how mass, space, and time are related (as well as lots of other theories about the universe). Black holes also seem to play a role in the formation of galaxies; it’s likely our supermassive black hole has something to do with how we came to be here today.



Pakistan's flagship ecological project in limbo as climate financing declines

Pakistan's flagship Indus River ecological project faces major setbacks due to a lack of international climate financing, risking severe water shortages and food security challenges, experts tell Anadolu



By Aamir Latif

Pakistan's flagship ecological project is in jeopardy as a lack of international climate financing collides with financial troubles at home, exacerbating the nation's struggles with water shortages and food security risks.

As one of the top 10 countries vulnerable to climate change, Pakistan requires a staggering \$17 billion investment to execute the "Indus Living Initiative," which aims to revive the mighty Indus River, the backbone of the country's agriculture and food production.

Government officials and analysts agree that securing this financing is "highly unlikely," primarily due to unfavorable global economic conditions.

Launched in 2021 under the Ministry of Climate Change, the initiative is envisioned as a 10- to 15-year umbrella program focused on restoring the ecological health of the Indus Basin within Pakistan.

"Pakistan is facing significant hurdles in securing climate financing for critical projects like the Living Indus due to multiple reasons, mainly the global economic conditions," said Saad Hayat Tamman, a former national coordinator of the Living Indus project.

Speaking to Anadolu, he noted that the COVID-19 pandemic, coupled with inflation, rising energy costs, and economic uncertainty, has reduced the availability of climate finance globally.

To complicate matters further, he added, Pakistan's existing economic struggles — such as high debt levels, fiscal deficits, and currency devaluation — have raised concerns for potential lenders and donors.

"This project is very crucial for Pakistan because the Indus River sustains 90% of the country's population, supports over 80% of its agriculture, and provides water to nine out of 10 largest cities," maintained Tamman.

Echoing this sentiment, Hussain Jarwar, an Islamabad-based water expert, emphasized the river's vital role in the country's food security, water availability, and economic stability.

"Living Indus is a significant initiative to rehabilitate the Indus Delta, which is dying due to climate change, water scarcity, and sea intrusion," he told Anadolu.

Competition for funds and administrative complexities

Beyond economic factors, Tamman identified growing competition among developing countries for climate funds and local administrative complexities as critical barriers to the project's launch.

"Developing countries across the globe are competing for the same limited pool of climate finance, particularly those vulnerable to climate change. This makes it harder for Pakistan to secure a significant share of the available funds, especially when many

other nations are in equally precarious positions,” he explained.

He asserted that Pakistan also faces internal challenges in streamlining processes for accessing international funds.

“Complex bureaucratic procedures, a lack of capacity in preparing compelling proposals, and weak institutional mechanisms for fund management hinder the ability to attract and mobilize climate finance,” he added.

Endorsing Tamman’s perspective, a senior official from the Climate Change Ministry admitted that Islamabad is “struggling” to secure the necessary financing for the project, which is “extremely” important, especially given the meagre rainfall in the lower Indus Valley.



“A combination of global economic conditions and national fiscal challenges has made it difficult for the country to access the necessary funds,” said the official, who requested anonymity due to restrictions on speaking publicly.

Agreeing with this assessment, a spokesperson for the ministry’s Living Indus Team, responsible for coordinating required investments, stated, “A more concerted and coordinated approach to climate financing is crucial for the long-term success of the initiative.”

“Failing to act would not only escalate environmental crises but could result in economic losses estimated at \$1.2 billion annually through natural disasters and resource depletion,” he warned.

Climate ‘debt trap’ and green-washing

The project encompasses 25 critical interventions aimed at restoring and preserving the ecological health of the Indus River Basin.

Key initiatives include ecological restoration through reforestation, water management, and biodiversity conservation, sustainable agriculture and water governance to address soil degradation and water scarcity, flood control and groundwater recharge through green infrastructure, as well as initiatives like zero plastic waste cities and urban forests.

The federal cabinet approved eight priority interventions in December 2022, yet

execution remains elusive.

While climate financing is intended to mitigate the consequences of climate change, concerns linger regarding its negative impacts.

“Many forms of climate financing, particularly loans, come with strings attached. For countries like Pakistan, these funds may increase the national debt burden if they are provided as loans or concessional credits rather than grants,” cautioned Jarwar.

Although the terms may seem favorable, repayment can still strain already fragile economies, he observed.

This situation, he added, can lead to a “climate debt trap,” where countries are compelled to repay loans for issues they did

not primarily cause, further deepening their financial challenges.

The World Bank Group has a history of promoting large hydro projects in Pakistan through its Investment Finance. However, little has been done to account for the perspectives of downstream communities and to address their grievances. This pursuit of unhindered hydropower development undermines the true potential of renewable energy generation in southern Pakistan, Jarwar argued.

Another factor hindering financing, according to Jarwar, is that debt-ridden Islamabad is cautious about accruing additional loans, relying instead on the “loss and damage fund” initiated by the UN Framework Convention on Climate following the catastrophic floods of 2022, which inundated one-third of Pakistan and caused colossal losses estimated at \$30 billion.

“It can be an opportunity for Pakistan, but the commitments from rich countries, whose fossil fuel-based economic model is the main reason for climate change, are lacking,” he added.

Supporting this view, Tamman expressed concern that climate financing from developed nations or international financial institutions, including the World Bank, may sometimes prioritize donor interests over the actual needs of recipient countries.

“For instance, funding may be directed toward projects that align with the donor’s climate agenda, such as renewable energy development, rather than urgent local needs like flood protection or water management, which are more critical for Pakistan’s context,” he said.

Additionally, he argued that some donor countries or institutions may use climate financing as a means to improve their global image or offset their own emissions while continuing environmentally harmful practices domestically.

“This can lead to accusations of green-washing, where the actual impact of the financing in terms of mitigating climate change is limited, while the donor countries continue to benefit from industries that contribute to global warming,” he added.

Disability Rights: A Comprehensive Overview



By Ayesha Shaeban

Introduction

Disability rights refer to the human rights of individuals with disabilities to ensure their full participation in society, equality before the law, and the provision of reasonable accommodations. The movement for disability rights has evolved significantly over the decades, influenced by various social, political, and economic factors. This article provides an in-depth exploration of disability rights, examining its history, key legislation, social implications, and ongoing challenges.

Historical Context

The understanding and treatment of individuals with disabilities have varied greatly throughout history. In ancient societies, disabilities were often viewed as divine punishment or a sign of moral failing. With the advent of the Enlightenment and the subsequent rise of the medical model, disability began to be seen primarily as a physical or mental defect that needed treatment or correction.

Early Activism

The modern disability rights movement began in the mid-20th century, inspired by broader civil rights movements. The 1960s and 1970s saw the emergence of advocacy groups, such as the Disability Rights Movement in the United States, which fought for the rights and recognition of individuals with disabilities. Key events, like the 504 Sit-in in 1977, were pivotal in raising awareness and pushing for legislative change.

International Perspective

The international discourse on disability rights gained momentum with the establishment of the United Nations (UN) and its various declarations. The UN's Standard Rules on the Equalization of Opportunities for Persons with Disabilities (1993) marked a significant milestone, promoting the rights and dignity of individuals with disabilities worldwide.

Americans with Disabilities Act (ADA)

Enacted in 1990, the ADA is a landmark piece of civil rights legislation in the United States. It prohibits discrimination against individuals with disabilities in various areas, including employment, public accommodations, transportation, and telecommunications. The ADA's implementation has significantly improved access and opportunities for many individuals with disabilities.

Individuals with Disabilities Education Act (IDEA)

IDEA, first passed in 1975 and amended several times, ensures that children with disabilities have access to free appropriate public education. This law mandates that schools develop individualized education programs (IEPs) tailored to meet the unique needs of students with disabilities.

United Nations Convention on the Rights of Persons with Disabilities (CRPD)

Adopted in 2006, the CRPD is a comprehensive international treaty that promotes and protects the rights of persons with disabilities. It emphasizes the importance of inclusion, accessibility, and the right to participate fully in society. The CRPD has been ratified by many countries, setting a global standard for disability rights.



Social Implications

Disability rights are not just about legal protections; they encompass social inclusion, accessibility, and the dismantling of stereotypes and stigma. The following areas highlight the social implications of disability rights:

Accessibility

Physical accessibility remains a critical concern. Many public spaces, transportation systems, and buildings are still not fully accessible, limiting the ability of individuals with disabilities to participate in everyday activities. The push for universal design creating spaces that are usable by everyone, regardless of ability has gained traction as a solution.

Employment

Employment rates for individuals with disabilities are often significantly lower than for their non-disabled peers. Discrimination in hiring, lack of reasonable accommodations, and workplace barriers contribute to this disparity. Advocating for

inclusive hiring practices and workplace accommodations is essential for improving employment outcomes for individuals with disabilities.

Education

Access to quality education is vital for individuals with disabilities to realize their potential. Despite legislation like IDEA, many students still face significant barriers in educational settings, including insufficient resources, lack of trained staff, and negative attitudes from peers and educators. Advocating for inclusive

education practices and supportive environments is crucial.

Healthcare

Individuals with disabilities often face disparities in healthcare access and quality. Barriers include physical access to facilities, lack of trained healthcare providers, and inadequate health insurance coverage. Addressing these disparities is essential to ensure that individuals with disabilities receive equitable healthcare.

Challenges Facing the Disability Rights Movement

Despite progress, significant challenges remain in the fight for disability rights:

Attitudinal Barriers

Negative stereotypes and societal attitudes toward individuals with disabilities can perpetuate discrimination and exclusion. Education and awareness campaigns are necessary to change perceptions and promote understanding.

Policy Gaps

While legislation exists to protect the rights of individuals with disabilities, gaps in enforcement and implementation often hinder progress. Ensuring that laws are followed and that individuals can seek redress for violations is crucial.

Intersectionality

The disability rights movement must also consider intersectionality how overlapping identities, such as race, gender, and socioeconomic status, impact the experiences of individuals with disabilities. Addressing these complexities is essential for a comprehensive approach to disability rights.

Global Disparities

Disability rights are far from uniform across the globe, with significant disparities existing between countries and regions. In many parts of the world, individuals with disabilities experience severe marginalization, facing barriers that prevent them from accessing basic services such as healthcare, education, and employment. Stigma and discrimination often lead to social isolation and violence against disabled individuals, exacerbating their challenges. In some countries, robust legal frameworks exist to protect the rights of individuals with disabilities, yet enforcement remains inconsistent. Conversely, in many developing nations, the lack of resources and infrastructure further compounds the difficulties faced by this population. International cooperation and advocacy are crucial to bridging these gaps. Organizations such as the United Nations work to promote the Convention on the Rights of Persons with Disabilities, encouraging countries to adopt inclusive policies. Grassroots movements and global partnerships can amplify the voices of individuals with disabilities, ensuring their needs are recognized and addressed. Ultimately, a concerted effort is necessary to dismantle barriers and foster an inclusive society where everyone, regardless of ability, can thrive.

The Role of Advocacy and Activism

Advocacy and activism play a vital role in advancing disability rights. Organizations

such as the National Council on Independent Living (NCIL) and the American Association of People with Disabilities (AAPD) work tirelessly to promote policies that support individuals with disabilities. Grassroots movements and social media have also emerged as powerful tools for raising awareness and mobilizing support.

Community Involvement

Community engagement is crucial in promoting disability rights. Involving individuals with disabilities in decision-making processes, policy development, and community planning ensures that their voices are heard and that their needs are met.

Education and Awareness

Raising awareness about disability rights and promoting inclusive practices in schools, workplaces, and communities is essential. Educational initiatives can help dismantle stereotypes and promote understanding of the challenges faced by individuals with disabilities.

Future Directions

The future of the disability rights movement lies in continued advocacy, education, and policy development. Key areas to focus on include:

Technology and Accessibility

Advancements in technology offer new opportunities for individuals with disabilities. Ensuring that technology is accessible and inclusive can enhance independence and participation in society.

Mental Health

Recognizing mental health as a component of disability rights is essential. Advocacy for mental health awareness, access to services, and the elimination of stigma surrounding mental health issues is vital.

Climate Change and Disability

Climate change poses unique challenges that disproportionately affect individuals with disabilities. As extreme weather events, rising sea levels, and other environmental changes become more frequent, those with disabilities often face greater risks due to physical barriers, lack of accessibility in emergency response, and limited mobility. For example, evacuation procedures during natural disasters may not accommodate the needs of disabled individuals, leaving them vulnerable. Additionally, the impacts of climate change such as deteriorating air quality and food insecurity can exacerbate existing health issues faced by individuals with disabilities. This

intersection of disability rights and environmental justice is increasingly recognized as a vital area of advocacy. Organizations are beginning to address these issues by promoting inclusive policies that ensure disabled individuals are considered in climate resilience planning. Advocates call for accessible emergency services, equitable resource distribution, and active participation of disabled individuals in decision-making processes regarding climate action. By highlighting these connections, the movement seeks to ensure that environmental justice includes everyone, recognizing that the fight against climate change must also encompass the rights and needs of people with disabilities.

Conclusion

Disability rights are a fundamental aspect of human rights, encompassing legal protections, social inclusion, and advocacy for equitable treatment. While significant progress has been made, ongoing challenges must be addressed to ensure that individuals with disabilities can fully participate in society. By promoting awareness, advocating for policy change, and fostering inclusive environments, we can move toward a more equitable future for all individuals, regardless of ability. The fight for disability rights is not just a fight for a marginalized group; it is a fight for the dignity and rights of all individuals.



Hania Aamir's 8 Years in the Entertainment Industry: A Journey of Talent and Charm



By Ayesha Shaeab

Hania Aamir, a name that has become synonymous with talent and charisma in the Pakistani entertainment industry, recently celebrated her eight-year journey in the limelight. From her debut in acting to becoming one of the most loved figures on social media, Hania's trajectory is a testament to her hard work, dedication, and the unwavering support of her fans.

A Promising Start: First Steps into Acting

Hania Aamir made her acting debut in the 2016 romantic comedy film *Janaan*, where she portrayed the character of a lively and spirited girl, instantly captivating audiences with her vibrant performance. This film not only marked her entry into the film industry but also showcased her potential to connect with viewers through her relatable and engaging persona. Her natural charm and strong screen presence were evident from the start, setting the stage for a successful career ahead.

Breaking into Television: Dramas that Defined Her Career

Following her success in *Janaan*, Hania transitioned to television, where she truly began to shine. Her first notable drama, *Titli* (2017), garnered immense popularity and marked her as a rising star in the industry. The series not only showcased her acting prowess but also her ability to portray complex emotions, winning her a loyal fanbase. Hania continued to impress audiences with her performances in several other hit dramas, including:

Dil Ruba (2020): A visually stunning drama that highlighted her versatility as an actress.

Mere Humsafar (2021): This drama became one of the highest-rated shows during its run, further solidifying her place in the industry.

Parizaad (2021): Hania's portrayal of

a strong and independent character resonated with viewers, earning her critical acclaim.

Throughout her journey, Hania's ability to take on diverse roles has not only showcased her talent but has also highlighted her commitment to her craft. Each drama added a unique layer to her career, showcasing her growth as an actress.

A Multifaceted Talent: Beyond Acting

In addition to her impressive acting skills, Hania Aamir has also made notable contributions as a model and social media influencer. She has worked with various brands, using her platform to promote not only fashion but also social causes. Hania's work often reflects her values, as she frequently advocates for mental health awareness and women's empowerment, resonating with a broad audience.

The Power of Social Media: A Connection with Fans

One of the most remarkable aspects of Hania Aamir's career is her strong connection with her fans, particularly on social media. As of now, she boasts millions of followers on Instagram, where she shares glimpses of her personal life, work, and the causes she supports. This openness has allowed her to build a close-knit community of fans who appreciate her authenticity and relatability.

Her Instagram presence isn't just about glamour; it's also a platform where she engages with her audience on various issues, creating a dialogue that fosters connection and understanding. Hania's ability to balance her professional and personal life on social media has endeared her to many, making her one of the most followed celebrities in Pakistan.

Support Beyond Borders: An International Fanbase

While Hania Aamir has firmly established herself in the Pakistani entertainment industry, her appeal extends far beyond the country's borders. Non-Pakistani fans have also embraced her work, attracted by her talent and the universal themes present in her dramas. Social media platforms have facilitated this connection, allowing her to reach audiences in various countries who

appreciate her performances and personality.

Hania's work has been particularly well-received in countries with significant South Asian diaspora communities, where viewers connect with the cultural narratives she portrays. Her ability to transcend borders and resonate with diverse audiences is a testament to her universal appeal as an actress.

Contributions to the Industry: A Rising Star

Hania Aamir's contributions to the entertainment industry go beyond her roles in films and dramas. She has been part of various initiatives aimed at uplifting the arts in Pakistan. Her involvement in projects that support emerging talent showcases her dedication to fostering the next generation of artists.

Moreover, her presence at film festivals and industry events has helped raise the profile of Pakistani cinema on global platforms. Hania's participation in discussions about the future of Pakistani entertainment illustrates her commitment to being an active part of the industry's evolution.

Looking Ahead: The Future of Hania Aamir

As Hania Aamir celebrates her eight years in the entertainment industry, the future looks incredibly bright. With a growing list

of successful projects and a rapidly expanding fanbase, she continues to explore new avenues in her career. Whether through challenging roles in dramas, film projects, or collaborations with international brands, Hania is poised to make a significant impact in the years to come.

Her fans eagerly anticipate her upcoming projects, knowing that each performance will bring something fresh and exciting. Hania's journey so far has been marked by resilience and passion, and it's clear that she is just getting started.

A Journey Worth Celebrating

Hania Aamir's eight-year journey in the entertainment industry is not just a story of personal success; it is also a celebration of talent, hard work, and the power of connection. From her debut in *Janaan* to becoming a beloved figure in the hearts of millions, Hania has consistently proven herself as an actress and influencer.

As she reflects on her past, it's evident that her journey is a source of inspiration for many aspiring artists. With the unwavering support of her fans, both in Pakistan and around the world, Hania Aamir is sure to continue her ascent in the entertainment world, leaving an indelible mark on the industry for years to come.

Here's to Hania Aamir—a true star who has made her mark and continues to shine brightly!





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